UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2016
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission file number: 333-191132-02

APX Group Holdings, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**46-1304852**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
4931 North 300 West Provo, UT	**84604**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (801) 377-9111

Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 12(g) of the Act: None

---

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☒ No ☐

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☐ No ☒

(Note: From January 1, 2016 until the effectiveness of the registrant's Registration Statement on Form S-4 (File No. 333-212390) on July 8, 2016 the registrant was, and from January 1, 2017 the registrant has been, a voluntary filer not subject to the filing requirements of Section 13 or 15(d) of the Exchange Act; as a voluntary filer not subject to the filing requirements of Section 13 or Section 15(d) of the Exchange Act, the registrant filed all reports pursuant to Section 13 or 15(d) of the Exchange Act during the preceding 12 months as if it were subject to such filing requirements.)

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting common stock held by non-affiliates of the registrant as of June 30, 2015, the last business day of the registrant's most recently completed second fiscal quarter was zero.

As of March 2, 2017 , there were 100 shares of the registrant's common stock par value $0.01 per share, issued and outstanding.

TABLE OF CONTENTS

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report on Form 10-K includes forward-looking statements regarding, among other things, our plans, strategies and prospects, both business and financial. These statements are based on the beliefs and assumptions of our management. Although we believe that our plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, we cannot assure you that we will achieve or realize these plans, intentions or expectations. Forward-looking statements are inherently subject to risks, uncertainties and assumptions. Generally, statements that are not historical facts, including statements concerning our possible or assumed future actions, business strategies, events or results of operations, are forward-looking statements. These statements may be preceded by, followed by or include the words “believes,” “estimates,” “expects,” “projects,” “forecasts,” “may,” “will,” “should,” “seeks,” “plans,” “scheduled,” “anticipates” or “intends” or similar expressions.

Forward-looking statements are not guarantees of performance. You should not put undue reliance on these statements which speak only as of the date hereof. You should understand that the following important factors, in addition to those discussed in “Risk Factors” and elsewhere in this annual report on Form 10-K, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- risks of the smart home and security industry, including risks of and publicity surrounding the sales, subscriber origination and retention process;
- the highly competitive nature of the smart home and security industry and product introductions and promotional activity by our competitors;
- litigation, complaints or adverse publicity;
- the impact of changes in consumer spending patterns, consumer preferences, local, regional, and national economic conditions, crime, weather, demographic trends and employee availability;
- adverse publicity and product liability claims;
- increases and/or decreases in utility and other energy costs, increased costs related to utility or governmental requirements;
- cost increases or shortages in smart home and security technology products or components; and
- the impact to our business, results of operations, financial condition, regulatory compliance and customer experience of the Vivint Flex Pay plan.

In addition, the origination and retention of new subscribers will depend on various factors, including, but not limited to, market availability, subscriber interest, the availability of suitable components, the negotiation of acceptable contract terms with subscribers, local permitting, licensing and regulatory compliance, and our ability to manage anticipated expansion and to hire, train and retain personnel, the financial viability of subscribers and general economic conditions.

These and other factors that could cause actual results to differ from those implied by the forward-looking statements in this annual report on Form 10-K are more fully described in the “Risk Factors” section of this annual report on Form 10-K. The risks described in “Risk Factors” are not exhaustive. Other sections of this annual report on Form 10-K describe additional factors that could adversely affect our business, financial condition or results of operations. New risk factors emerge from time to time and it is not possible for us to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

WEBSITE AND SOCIAL MEDIA DISCLOSURE

We use our website (www.vivint.com), our company blog (blog.vivint.com), corporate Twitter and Instagram accounts (@VivintHome), and our corporate Facebook account (VivintHome) as channels of distribution of company information. The information we post through these channels may be deemed material. Accordingly, investors should monitor these channels, in addition to following our press releases, SEC filings and public conference calls and webcasts. In addition, you may automatically receive e-mail alerts and other information about the Company when you enroll your e-mail address by visiting the "Email Alerts" section of our website at www.investors.vivint.com . The contents of our website and social media channels are not, however, a part of this report.

BASIS OF PRESENTATION

On November 16, 2012, APX Group, Inc. ("APX") and two of its historical affiliates, V Solar Holdings, Inc. ("Solar") and 2GIG Technologies, Inc. ("2GIG"), were acquired by an investor group (collectively, the "Investors") comprised of certain investment funds affiliated with Blackstone Capital Partners VI L.P. ("Blackstone" or the "Sponsor"), and certain co-investors and management investors. This acquisition was accomplished through certain mergers and related reorganization transactions (collectively, the "Merger" and, together with certain related financing transactions, the "Transactions") pursuant to which each of APX Group, Inc., Solar and 2GIG became indirect wholly-owned subsidiaries of 313 Acquisition LLC ("Acquisition LLC" or "313"), an entity wholly-owned by the Investors. Upon the consummation of the Merger, APX Group, Inc. and 2GIG became consolidated subsidiaries of APX Group Holdings, Inc. ("Holdings", "Parent Guarantor" or "Parent"), which in turn is wholly-owned by APX Parent Holdco, Inc., which in turn is owned by Acquisition LLC, and Solar became a direct wholly-owned subsidiary of Acquisition LLC. Acquisition LLC, APX Parent Holdco, Inc. and Parent Guarantor have no independent operations and were formed for the purpose of facilitating the Merger.

Unless the context suggests otherwise, references in this annual report on Form 10-K to "Vivint ® ," the "Company," "we," "us" and "our" refer to the Parent Guarantor and its subsidiaries. References to the "Issuer" refer to APX Group, Inc., exclusive of its subsidiaries. References to "Parent Guarantor" refer to Holdings, exclusive of its subsidiaries.

On April 1, 2013 we completed the sale of 2GIG and its subsidiary (the "2GIG Sale") to Nortek, Inc. ("Nortek"). In connection with the 2GIG Sale, we entered into a five-year supply agreement with 2GIG, pursuant to which they will be the exclusive provider of our control panel requirements, subject to certain exceptions as provided in the supply agreement. 2GIG does not and will not provide any credit support for any of our indebtedness, including indebtedness incurred under our revolving credit facility, our 6.375% Senior Secured Notes due 2019 (the "2019 notes"), 8.75% Senior Notes due 2020 (the "2020 notes"), our 8.875% Senior Secured Notes due 2022 (the "2022 private placement notes") or our 7.875% Senior Secured Notes due 2022 (the "2022 notes" and, together with the 2019 notes, 2020 notes and 2022 private placement notes, the "notes").

The term "attrition" as used in this annual report on Form 10-K refers to the aggregate number of canceled smart home and security subscribers during a period divided by the monthly weighted average number of total smart home and security subscribers for such period. Subscribers are considered canceled when they terminate in accordance with the terms of their contract, are terminated by us or if payment from such subscribers is deemed uncollectible (when at least four monthly billings become past due). Sales of contracts to third parties, certain moves and takeovers are excluded from the attrition calculation.

The term "net subscriber acquisition costs" as used in this annual report on Form 10-K refers to the direct and indirect costs to create a new smart home and security subscriber. These include commissions, equipment, installation, marketing and other allocations (general and administrative and overhead); less activation fees, installation fees and upsell revenue. These costs exclude residuals and long-term equity expenses associated with the direct-to-home sales channel.

The term Monthly Revenue per User ("RPU") is the recurring monthly revenue billed to a smart home and security subscriber.

The term "total RPU" is the aggregate RPU billed to all smart home and security subscribers.

The term "total subscribers" is the aggregate number of active smart home and security subscribers at the end of a given period.

The term Average RPU ("ARPU") is the total RPU divided by total subscribers.

The term Average Revenue per New User ("ARPNU") is the aggregate RPU for new subscribers originated during a period divided by the number of new subscribers originated during such period.

The term "net subscriber acquisition multiple" means total net subscriber acquisition costs, divided by the number of new subscribers originated, and then divided by the ARPNU.

The term "net service cost per subscriber" means total service costs for the period, including monitoring, customer service, field service and other allocations (general and administrative and overhead) costs, less total service revenue for the period divided by total subscribers.

The term “net service margin” means the ARPU for the period less net service costs divided by the ARPU for the period.

The term “IRR” means the unlevered internal rate of return per subscriber calculated based on our estimates and assumptions related to net subscriber acquisition cost per subscriber, net servicing cost per subscriber, ARPNU and attrition.

Unless specified otherwise, amounts in this annual report on Form 10-K are presented in United States ("U.S.") dollars. Defined terms in the financial statements have the meanings ascribed to them in the financial statements.

PART I

ITEM 1. BUSINESS

Company Overview

We are one of the largest companies in North America focused on delivering smart home and security products and services. Our fully integrated smart home platform offers subscribers a comprehensive suite of products and services to remotely control, monitor and manage their homes using any Internet-connected smart device. Unlike many other smart home companies that focus only on selling equipment and software, subscriber origination or servicing, we are a vertically integrated smart home company, owning the entire customer lifecycle including sales, professional installation, service, monitoring, billing and customer support. We believe that with our proven business model, along with 17 years of experience installing integrated solutions, we are well positioned to continue to lead the large and growing smart home market. We offer homeowners a customized smart home that integrates a wide variety of smart home and security products. We seek to deliver a quality subscriber experience through a combination of innovative products and services and a commitment to customer service, which together with our focus on originating high-quality new subscribers, has enabled us to achieve attrition rates we believe are historically at industry averages, while continuing to increase RPU as a result of increased adoption of smart home products and services. Through our established underwriting criteria and compensation structure, we have built a portfolio of approximately 1,147,000 subscribers in North America, with an average credit score of 714 , as of December 31, 2016 . Over 95% of our revenues during the years ended December 31, 2016 , 2015 and 2014 , respectively, consisted of contractually committed revenues, which have historically resulted in predictable and consistent operating results.

We generate new subscribers through two primary sales channels: our "direct-to-home" and "inside sales" channels. We believe our sales model gives us control over our net subscriber acquisition costs and achieve a high adoption rate of subscriber contracts that include smart home services. For example, the percentage of our new subscribers contracting for smart home services in addition to our traditional security services grew from 58% in 2012 to 86% in 2016 . We generate the majority of our new subscribers through our direct-to-home sales channel, which uses teams of trained seasonal sales representatives. For the year ended December 31, 2016 , we generated approximately 64% of our new subscribers through our direct-to-home sales channel. In this channel we have historically employed between 2,000 and 2,500 sales representatives and approximately 1,100 installation technicians, who are largely commission-based and deployed in targeted geographical locations. This results in a highly variable cost structure, subscriber density and the ability to complete same-day installations. We also originate a portion of our new subscribers through our inside sales channel, which includes our inside sales team, digital marketing, advertising, and third-party lead generators. For the year ended December 31, 2016 , we generated approximately 36% of our new subscribers through inside sales. Over time, we expect the number of new subscriber contracts generated through inside sales to continue to grow.

Our focus on creating a high-quality subscriber portfolio produces an attractive return profile with an unlevered IRR in the low to mid 20% range, depending on contractual terms and mix of product and service offerings. As of December 31, 2016 , based on FICO score at the time of contract origination, approximately 93% of our subscribers had a FICO score of 625 or greater, and the average FICO score of our portfolio was 714 . In addition, for the year ended December 31, 2016 , over 69% of our new subscribers paid activation fees and, as of December 31, 2016 , approximately 91% of our total subscribers are set up on an automatic payment method. We believe that originating high-quality subscribers and our commitment to customer service increases retention, which leads to predictable cash flows.

Our business generates positive cash flows from ongoing monitoring and service revenues, which we choose to invest in new subscriber acquisitions and development of additional products and services. During the year ended December 31, 2016 and 2015 , respectively, we generated $757.9 million and $653.7 million in total revenue, including $724.5 million and $625.0 million , respectively, in recurring revenue. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources."

The Smart Home and Security Industries

According to Strategy Analytics, total consumer spending for smart home solutions in the U.S. reached $30.7 billion in 2016 and they project it will grow to nearly $57.9 billion by 2021.

ABI Research estimates the total number of new smart homes in North America will grow from approximately 19.7 million in 2016 to approximately 68.9 million in 2020. New smart homes are defined as residences where a smart home device or system is being purchased for the first time.

According to Barnes Associates estimates, the U.S. market for monitoring and related residential electronic security services was over $27 billion in revenue in 2016 and has grown every year for the past 10 years. This market is characterized by stable revenues from contractually committed recurring monthly payments and has proven to be recession-resistant through the last two economic downturns.

Products and Services

Our portfolio of integrated smart home products and services allow subscribers to remotely control, monitor and manage their homes from any smart device. Subscribers can create a customized Vivint smart home that includes smart locks, thermostats, indoor and outdoor cameras, lighting controls, garage door controllers, doorbell cameras, cloud data storage and playback, voice control, a panic pendant, small appliance/lamp control modules and an array of sensors including smoke, motion, carbon monoxide, door, window, flood, freezer and glass break.

The Vivint Smart Home Cloud is our proprietary, integrated smart home platform. Seamless interaction between the platform and all our devices eliminates many of the usability, interoperability and support issues for consumers caused by the fragmented, stand-alone solutions offered by other smart home companies. The Vivint Smart Home Cloud also integrates with leading third-party smart home products, including Kwikset smart locks, Amazon Echo ® and the Nest Learning Thermostat ® (“Nest”) which allows us to offer a comprehensive, voice-controlled smart home. Over time, we may integrate other smart home products and technologies into our platform.

With a Vivint smart home, subscribers can arm and disarm their security system; receive alerts and notifications regarding activity in their home; control smart home products such as thermostats, door locks, lighting controls; and view live and recorded video, either through their panel or remotely through the Vivint Smart Home app or any Internet-connected smart device.

We offer several customized smart home and security products and services, all of which include 24x7x365 security monitoring, including our proprietary Vivint SkyControl panel with a 7-inch touchscreen and two-way voice communication, smoke detector, three door and window sensors, motion detector, a key fob, customer support, our mobile app, event notifications and severe weather alerts. For a $198 activation fee, subscribers receive a professionally installed custom smart home system with a monthly service fee and a service agreement ranging from 42 to 60 months. During 2016 , the monthly service fees generally ranged from $49.99 to $69.99, depending on the service offerings included in a specific subscriber contract. New subscribers may also order additional products, which are typically billed to the subscriber through increased RPU. We also offer wireless Internet services, the revenues of which were not material to our overall business or operating results for the year ended December 31, 2016 .

Existing subscribers may order additional products or upgrade their current services. When they do this, a local smart home professional (“SHP”) performs the installation at the subscriber’s home, which may result in additional service charges. In addition, the subscriber is typically billed for the cost of the equipment installed and their RPU increases for the additional service offerings.

In order to provide the integrated products and services requested by our subscribers, we continually review our product and service offerings, and as a result we expect to modify these offerings in the future.

On January 3, 2017, we announced the introduction of the “Vivint Flex Pay” plan. Under the Vivint Flex Pay plan, we (i) will launch a program (the “Consumer Financing Program”) in the first quarter of 2017, pursuant to which we will offer to qualified customers in the United States an opportunity to finance the purchase of products (the “Products”) used in connection with our smart home and security services through a third party financing provider and (ii) have begun to offer retail installment contracts (“RICs”) with respect to the purchase of Products to certain customers who do not qualify to participate in the Consumer Financing Program, but qualify under our historical underwriting criteria. We may also establish credit programs either directly or through an affiliate or pursuant to an agreement with a third party to provide installment loans or similar products to customers that do not qualify to participate in the Consumer Financing Program. Alternatively, customers may purchase the Products with cash or credit card.

Operations

Our management team has a proven record of strong growth and operational excellence and, as a result of their leadership, we have successfully grown revenue and total RPU every year since 2006. Our CEO Todd Pedersen, a visionary leader who encourages a highly entrepreneurial culture that fosters innovation, founded the Company in 1999. Our senior management team averages over 18 years of experience in high growth or large public companies.

We are one of a few smart home service companies in North America that generates nearly all of its revenue organically from a fully integrated model that encompasses all aspects of the subscriber experience, including sales, professional installation, servicing and monitoring. This approach allows us to deliver a consistent, quality subscriber experience. We believe this contributes to a strong adoption rate for service offerings beyond traditional security and attrition rates at or below industry average. During the year ended December 31, 2016 , 86% of new subscriber contracts included smart home service offerings. We also enhance the quality of our subscribers’ experience through proven operational performance. During the year ended December 31, 2016 , our average response time to alarms was approximately 11 seconds from the time the signal was received at our monitoring stations. We believe the enhanced functionality of our offerings, along with the introduction of innovative new products and services, results in increased subscriber usage. An average of 82% of our surveyed subscribers indicated use of their system at least once per week during the year ended December 31, 2016 . We believe increased subscriber usage contributes to higher customer satisfaction and may lead to lower attrition.

Our integrated subscriber experience allows our sales representatives, customer service representatives and installation technicians to work closely together to provide the subscriber with a seamless process from contract origination to daily use. We believe our SHPs and customer service representatives deliver a quality customer service experience that enhances our brand and improves customer satisfaction. Customer service representatives generally resolve a majority of maintenance and service related questions over the telephone or through remote-access to the subscriber’s system. By successfully scaling operations as our business continues to grow, our net service margins have remained at approximately 74% for the years ended December 31, 2016 and December 31, 2015 , despite the continued increase in complexity of our product and service offerings.

Field Service

We employ full-time SHPs throughout North America, who reside in their service territories, to provide prompt service to our subscribers. SHPs undergo comprehensive training on all of our product and service offerings. The SHPs typically focus on maintenance and service issues, but also install products and services for a portion of our new subscribers, primarily those originated through inside sales. In addition, we contract with third-party field service professionals to perform a portion of our field service calls.

We provide SHPs with supplies of products and materials, which are replenished frequently through shipments from our central warehouse, forward storage locations and third-party logistics sites. We also provide our SHPs with a company-branded service vehicle.

We utilize software to schedule appointments, route technicians and follow-up with subscribers to ensure that the service was performed to the subscriber’s satisfaction. All of our full-time SHPs receive updates via a smartphone or tablet detailing their next service appointment or installation through our custom software that connects to several back-end systems, including our customer relationship management system (“CRM”), our inventory management software and our workforce management systems.

Customer Service and Alarm Monitoring

Our customer service centers are located in Utah. Our two central monitoring facilities are located in Utah and Minnesota and are fully redundant. Both our customer service centers and our central monitoring facilities are open 24 hours a day, 7 days a week, and 365 days a year. We have received industry awards for our customer service and alarm monitoring operations.

All employees who work in customer service undergo training on billing related issues, as well as service offering questions. Customer service representatives are required to pass background checks and, depending upon their job function, may require licensing by the state of Utah. All professionals who work in our monitoring facilities undergo comprehensive training and are required to pass background checks and, in certain cases, licensing tests or other checks to obtain the required licensing. Customer service representatives generally resolve a majority of maintenance and service related questions over the telephone or through remote-access to the subscriber’s panel. Issues not resolved by customer service require a SHP to visit the subscriber’s home, which may result in an additional charge to the subscriber.

Billing

Our billing representatives are located in our Utah offices. We cross-train our billing representatives to also handle general customer service inquiries with the goal of improving the subscriber experience and to increase personnel flexibility. Billing representatives are also required to pass background checks and, depending upon their job function, may also require licensing by the state of Utah. A majority of our subscribers pay electronically either via ACH or credit card. A subscriber who pays electronically is generally placed on a billing cycle based on their contract origination date and, in certain instances, the subscriber may choose their billing date. Our customers billed via direct invoice can be billed on any day of the month, with payment due 25 days subsequent to the invoice date. Subscribers are billed in advance for their monthly services based on the subscriber's billing cycle and not calendar month.

From time to time, for various reasons we may issue a credit to a subscriber for a payment otherwise due, including addressing subscriber concerns or obtaining the renewal of a subscriber contract. Any such credit decreases revenue and cash collected on the relevant subscriber contract in the amount of such credit.

Key Systems

In 2014, we implemented an integrated customer relationship management and billing system software, based on a well-established enterprise-scale cloud solution. This CRM allows us to scale our business, providing the flexibility to accommodate the multiple customer support and billing models resulting from the continued expansion in our product and service offerings over time. The CRM replaced all of the functions previously performed by our internally developed relationship management system ("CMS"), except for field service inventory tracking. The CRM enables one-call resolution and allows for operational efficiency by not requiring the entry of data multiple times, thus improving data accuracy. Additionally, the data is replicated to both a reporting and a business intelligence server to reduce processing time, as well as to an offsite server used for disaster recovery purposes.

In the first fiscal quarter of 2017, we implemented new enterprise resource planning software ("ERP"), primarily to manage financial accounting, inventory and supply chain functions of our business. The ERP replaces CMS for field service inventory tracking and our legacy financial accounting and inventory management systems. Similar to the CRM, the new ERP allows us to scale our operations to accommodate the continued expansion of our business models and product and service offerings. The ERP also provides improved security and automated system controls.

Software Platform

Nearly 100% of our new subscribers installed in 2016 use our proprietary Vivint Smart Home Cloud platform, consisting of our SkyControl panel, equipment, cloud software, mobile application and online interface. The SkyControl panel is connected to the Internet via cellular communication and mobile devices through cloud software. We license certain intellectual property from Alarm.com to support the SkyControl panel. The Vivint Smart Home Cloud platform enables subscribers using SkyControl to access their systems remotely either directly from the web or through our Vivint Smart Home app and it facilitates communications between the panel and our monitoring stations. The Vivint Smart Home platform allows our subscribers the ability to remotely arm and disarm their security system; receive alerts and notifications regarding activity in their home; control smart home products such as thermostats, door locks, lighting controls; and view live and recorded video.

Go!Control was our primary panel installed in new subscribers' homes prior to the launch of our Vivint Smart Home Cloud platform. We license certain communications infrastructure, software and services to support the Go!Control panel from Alarm.com. The Go!Control panel is also connected to the Internet, smart phones and tablet applications through Alarm.com's hosted platform. Alarm.com also provides the web interface and technology to enable our subscribers using Go!Control panels to access their systems remotely and it facilitates communication between the panel and monitoring stations through third party cellular networks.

Subscriber Contracts – Smart Home and Security

We seek to ensure that our subscribers understand our product and service offerings, along with the key terms of their contracts by conducting two surveys with every subscriber. The first survey is conducted live via telephone prior to the execution of the contract and installation, and the second survey is conducted on-line after the installation is completed. These telephonic surveys are recorded and stored in our CRM, enabling easy access and review.

Term and Termination

Historically, we have offered contracts to subscribers that range in length from 36 to 60 months, subject to automatic monthly renewal after the expiration of the initial term. Since the beginning of 2013, a significant portion of new subscribers have entered into 60 -month contracts. Subscribers have a right of rescission period prescribed by applicable law during which such subscriber may cancel the contract without penalty or obligation. These rescission periods range from 3 to 15 days, depending on the jurisdiction in which a subscriber resides. As a company policy we provide new subscribers 70 years of age and older a 30 -day right of rescission. Once the applicable rescission period expires, ownership of the equipment transfers to the subscriber and the subscriber is responsible for the monthly services fees under the contract.

Upfront and Monthly Services Fees

Our subscribers typically pay an activation fee, as well as an installation fee for certain of our products, (unless either of these fees is waived by us) and the first month's service at the time of installation. Under the contract, we have the right to pass through to the subscriber any increase in third party costs such as utility or governmental expenses. We have the right to increase the monthly service fees at the time of renewal with prior written notice.

Other Terms

We provide our subscribers with maintenance free of charge for the first 120 days. After 120 days, we will repair or replace defective equipment without charge, but we typically bill the subscriber a charge for each service visit. If a utility or governmental agency requires a change to equipment or service after installation of the system, the subscriber may be charged for the equipment and labor associated with the required change.

We do not provide insurance or warrant that the system will prevent a burglary, fire, hold-up or any such other event. Our contracts limit our liability to a maximum of $2,000 per event and, where permissible, provide a one-year statute of limitations to file an action against us. We may cease or suspend monitoring and repair service due to, among other things, work stoppages, weather, phone service interruption, government requirements, subscriber bankruptcy or non-payment by subscribers after we have given notice that their service is being cancelled due to such non-payment.

Vivint Flex Pay

Beginning in the first quarter of 2017, under the Vivint Flex Pay plan, customers pay separately for the Products and Vivint's smart home and security services. We will begin offering customers an opportunity to finance the purchase of Products under the Consumer Financing Program, where qualified customers will be eligible for zero-percent (0% APR) interest installment loans provided by a third party financing provider of up to $4,000 for either a 42 or 60 month term. We are initially offering RICs for 42 or 60 month terms to certain customers, who qualify under our historical underwriting criteria, but do not qualify to participate in the Consumer Financing Program and may establish credit programs either directly or through an affiliate or pursuant to an agreement with a third party to provide installment loans or similar products to such customers. Along with the purchase of the Products, customers enter into a service agreement with simple pricing of $39.99 per month for basic security or $49.99 per month for smart home services with the same term lengths as their installment loan agreements or RICs.

Suppliers

We provide our services through a panel installed at the premises of our subscribers. As of December 31, 2016 , approximately 57% of our installed panels were SkyControl panels, 40% were 2GIG Go!Control panels, and 3% were other panels. Since early 2014, our primary panel installed for new subscribers is the SkyControl panel. The 2GIG Go!Control panel was our primary panel for subscribers from the beginning of 2010 through early 2014. In 2013, we completed the 2GIG Sale as described above under "—Basis of Presentation." In connection with the 2GIG Sale, we retained sole ownership of the intellectual property and exclusive rights with respect to the SkyControl Panel and certain peripheral equipment. This proprietary equipment is a critical component of our current smart home and security offerings, and we expect it to remain a critical component of our future offerings as well. In addition, at the time of the 2GIG Sale we entered into a five-year supply agreement with 2GIG, pursuant to which they will be the exclusive provider of our control panel requirements and certain peripheral equipment, subject to certain exceptions.

We license certain communications infrastructure, software and services to support the Go!Control panel from Alarm.com. The Go!Control panel is also connected to the Internet and smart devices through Alarm.com's hosted platform. Alarm.com also provides the web interface and technology to enable our subscribers using Go!Control panels to access their systems remotely and it facilitates communication between the panel and monitoring stations through third party cellular networks.

Generally, our third-party distributors maintain a safety stock of certain key products or equipment to cover any minor supply chain disruptions. Where possible we also utilize dual sourcing methods to minimize the risk of a disruption from a single supplier.

Sales and Marketing

We have two primary sales channels: direct-to-home and inside sales. For the year ended December 31, 2016 , we generated approximately 64% of our new subscribers through our direct-to-home sales channel and approximately 36% through inside sales. We believe our approach to managing our sales channels allows us to achieve a higher adoption rate of new service offerings compared to our competitors, while managing subscriber acquisition costs. Our net subscriber acquisition cost per subscriber in 2016 was in the $1,975 to $2,025 range, a substantial portion of which is variable. Our net subscriber acquisition cost per subscriber represented approximately 30 times our ARPNU added in 2016 . We continually evaluate ways to improve the effectiveness of our subscriber acquisition activities in our direct-to-home, inside sales and other sales channels.

Because we believe attrition is highly correlated with FICO scores and payment type, our compensation structure incentivizes quality subscriber generation by tying compensation to these factors. We have enhanced our underwriting criteria over time, resulting in an average FICO score of our subscriber portfolio of 714 , with sub-600 FICO score subscribers representing only approximately 2% of our subscriber portfolio and approximately 93% of our subscribers having FICO scores of 625 or greater, as of December 31, 2016 .

Direct-to-Home Sales

Our direct-to-home sales channel is typically comprised of between 2,000 and 2,500 sales representatives who benefit from our recruiting and training programs designed to promote professionalism and sales productivity. Each year, between April and August, our sales teams travel to approximately 120 pre-selected markets throughout North America to sell our product and service offerings. Markets are selected each year based on a number of factors, including demographics, population density and our past experience selling in these markets. Because expenses associated with our direct-to-home sales channel are directly correlated with new subscriber acquisition, we avoid a large fixed cost base and are able to deploy a flexible go-to-market strategy every year. A typical sales team consists of approximately 25 sales representatives and a designated sales manager. Each sales team is supported by approximately 10 trained installation technicians, including a manager for the technicians. There are also regional managers who generally oversee six to eight sales or installation teams.

In 2015, we introduced a new program whereby a limited number of direct-to-home sales representatives reside in certain select markets and sell in those markets on a year round basis. While currently minimal, we expect the number of new subscriber contracts generated through this program to continue to increase over time.

Inside Sales

Subscribers originated through our inside sales channel has grown as a percentage of our total originations from approximately 10% in 2009 to approximately 36% for the year ended December 31, 2016 . Our inside sales channel utilizes both inbound and outbound leads provided by our marketing department to sell to subscribers in the United States and Canada. The marketing department generates leads through multiple sources, both digital and traditional, including leads generated through digital marketing sources such as paid, organic and local search and display advertising. Traditional lead sources include television and radio advertising, shared mail, email remarketing and third-party lead generation affiliates. Upon receiving an inbound lead from a potential subscriber requesting information on our products and service offerings, one of our inside sales representatives calls the potential subscriber. Additionally, our inside sales channel includes third-party partners that both generate leads and complete sales on behalf of Vivint.

Sales and Origination Strategy and Compensation

Sales representatives receive compensation based on the number of qualifying sales during the annual sales period. Criteria for qualifying sales include, but are not limited to, the amount of RPU, the number of points of protection, subscriber FICO score, etc. To motivate sales representatives and help align compensation with subscriber quality, we have created a point system. The point system provides the sales representative flexibility to tailor the offering to the subscriber’s needs while maintaining control through a direct link to the sales representative’s compensation. In addition, a significant portion of the direct-to-home sales representative’s compensation is not paid until after the completion of the selling season and is paid only on those subscribers who satisfy certain criteria. In order to retain our sales professionals, we pay ongoing residual commissions to sales management for active subscriber accounts generated through their organization.

Strategy

Strong Platform for Growth

We have established a history of capitalizing on our business model and technology to offer new products and service offerings, as evidenced by the launch of our smart home products and services in 2011 and the Vivint Smart Home Cloud platform and SkyControl panel in early 2014. Our innovative products and service offerings have enabled us to increase ARPNU from $44.50 in 2009 to $66.81 for the year ended December 31, 2016 . Going forward, we intend to capitalize on the low incremental costs inherent in our business model and existing technology to increase market penetration in our existing channels and expand into new sales channels.

Innovation

We strive to bring easy-to-use technology to our subscribers, which allow them to use our products and services efficiently. As evidenced by the launch of our proprietary Vivint Smart Home Cloud platform in early 2014, we have a reputation for developing and deploying products and services for the home that have robust functionality and that are easy to install and use. Both our SkyControl and Go!Control panels provide a platform to introduce new products and service offerings to our subscribers. Another example of our emphasis on providing innovative solutions to our subscribers is our acquisition of Space Monkey, Inc. (“Space Monkey”) in August 2014, which provides a distributed cloud storage technology solution, including the Vivint Smart Drive that integrates with our Vivint Smart Home Cloud platform. By focusing on innovation, and enhancing the functionality of our existing products and service offerings, we believe we can increase new subscriber originations, subscriber usage and customer satisfaction, thereby potentially increasing RPU and lowering our attrition.

To enhance the functionality of the products and services included in our systems, we use various third-party manufacturers and service providers in addition to our in-house development and design of certain products and services. We believe that developing, designing and selling our own products and services that are differentiated from those of our competitors will be a critical driver of our future success. For example, in 2015 we introduced our award winning Vivint Doorbell Camera, which allows homeowners to see, hear and speak to anyone on their doorstep, and which enables customers to decide whether to remotely unlock the door for visitors or open the garage door for a package delivery, if they have those services. In 2016, we introduced the Vivint Ping indoor camera, a two-way talk camera with one-touch callout. We expect to continue introducing new, innovative products and services, including panels and peripherals, along with integrated cloud services. We own the design of these new products, and in certain circumstances leverage partnerships with third parties, particularly Original Design Manufacturers for the manufacture of new products (e.g., video cameras, thermostats, door lock hardware). By vertically integrating the development and design of our products and services with our existing sales and customer service activities, we believe we are able to more quickly respond to market needs, and better understand our subscribers’ interactions and engagement with our products and services. This provides critical data enabling us to improve the power, usability and intelligence of these products and services.

To further increase the value subscribers receive from our products and services, our Vivint Smart Home Cloud platform also integrates with leading third-party smart home technologies, including Amazon Echo and the Nest Thermostat. Over time, we may integrate other smart home technologies into our platform.

Our innovation center is located in Lehi, Utah, which focuses on the research and development of new products and services, both within and beyond our existing service offerings. Professionals and engineers at our innovation center have expertise in all aspects of the development process, including hardware development, software development, design and quality assurance. During the years ended December 31, 2016 , 2015 and 2014 we spent approximately $24.2 million , $16.4 million and $17.4 million , respectively on associated research and development costs.

Competition

The smart home industry is highly competitive and fragmented. Our major competitors include security, telecommunications and cable companies that also deliver smart home and security services, such as Protection One, Inc. and ADT Corporation (Protection One, Inc. merged with ADT Corporation in 2016); AT&T; Comcast Corporation; Stanley Security Solutions, a subsidiary of Stanley Black and Decker; MONI, a subsidiary of Ascent Capital Group, Inc.; and Tyco Integrated Security, a subsidiary of Tyco International Ltd.

We face increasing competition from competitors who are building their own smart home platforms, such as Amazon, Apple and Google, as well as from companies that offer single-point smart home solutions. Having installed over 2.0 million smart home and security systems, we believe we are well positioned to compete with them because we benefit from more than

17 years of experience, our efficient direct-to-home sales channel, innovative products and our award-winning customer service.

We also compete with numerous smaller regional and local providers. We also face, or may in the future face, competition from other providers of information and communication products and services, a number of which have significantly greater capital and other resources than we do.

Companies in our industry compete primarily on the basis of price in relation to the quality of the products and services they provide. The Company's brand and reputation, market visibility, service and product capabilities, quality, price, efficient direct-to-home sales channel, and the ability to identify and sell to prospective customers, are all factors that contribute to competitive success in the smart home industry. We emphasize the quality of the service we provide, rather than focusing primarily on price competition. We believe we compete effectively against other national, regional and local companies offering smart home and security alarm monitoring services by offering our subscribers an integrated smart home, along with an attractive value proposition, and our proven, award-winning customer service.

Intellectual Property

Patents, trademarks, copyrights, trade secrets, and other proprietary rights are important to our business and we continuously refine our intellectual property strategy to maintain and improve our competitive position. We seek to protect new intellectual property to safeguard our ongoing technological innovations and strengthen our brand, and we believe we take appropriate action against infringements or misappropriations of our intellectual property rights by others. We review third-party intellectual property rights to help avoid infringement, and to identify strategic opportunities. We typically enter into confidentiality agreements to further protect our intellectual property.

We own a portfolio of issued U.S. patents and pending U.S. and foreign patent applications that relate to a variety of smart home, security and wireless Internet technologies utilized in our business. We also own a portfolio of trademarks, including domestic and foreign registrations for Vivint ® , and are a licensee of various patents, from our third-party suppliers and technology partners. Because of the importance that customers place on reputation and trust when making a decision on a smart home and security provider, our brand is critical to our business. Patents related to individual products or technologies extend for varying periods dependent on the date of patent filing or grant and the legal term for patents in the various countries where we have sought patent protection. Trademark rights may potentially extend for longer periods of time and are dependent upon national laws and use of the marks.

Government Regulations

United States

We are subject to a variety of laws, regulations and licensing requirements of federal, state and local authorities.

We are also required to obtain various licenses and permits from state and local authorities in connection with the operation of our businesses. The majority of states regulate in some manner the sale, installation, servicing, monitoring or maintenance of smart home and electronic security systems. In the states that do regulate such activity, our company and our employees are typically required to obtain and maintain licenses, certifications or similar permits from the state as a condition to engaging in the smart home and security services business.

In addition, a number of local governmental authorities have adopted ordinances regulating the activities of security service companies, typically in an effort to reduce the number of false alarms in their jurisdictions. These ordinances attempt to reduce false alarms by, among other things, requiring permits for individual electronic security systems, imposing fines (on either the subscriber or the company) for false alarms, discontinuing police response to notification of an alarm activation after a subscriber has had a certain number of false alarms, and requiring various types of verification prior to dispatching authorities.

Our sales and marketing practices are regulated by the federal, state and local agencies. These laws and regulations typically place restrictions on the manner in which products and services can be advertised and sold, and to provide residential purchasers with certain rescission rights. In certain circumstances, consumer protection laws also require the disclosure of certain information in the contract with our subscriber and, in addition, may prohibit the inclusion of certain terms or conditions of sale in such contracts.

Canada

Companies operating in the smart home and electronic security service industry in Canada are subject to provincial regulation of their business activities, including the regulation of direct-to-home sales activities and contract terms and the sale, installation and maintenance of smart home and electronic security systems. Most provinces in Canada regulate direct-to-home sales activities and contract terms and require that salespeople and the company on whose behalf the salesperson is selling obtain licenses to carry on business in that province. Consumer protection laws in Canada also require that certain terms and conditions be included in the contract between the service provider and the subscriber.

A number of Canadian municipalities require subscribers to obtain licenses to use electronic security alarms within their jurisdiction. Municipalities also commonly require entities engaged in direct-to-home sales within their municipality to obtain business licenses.

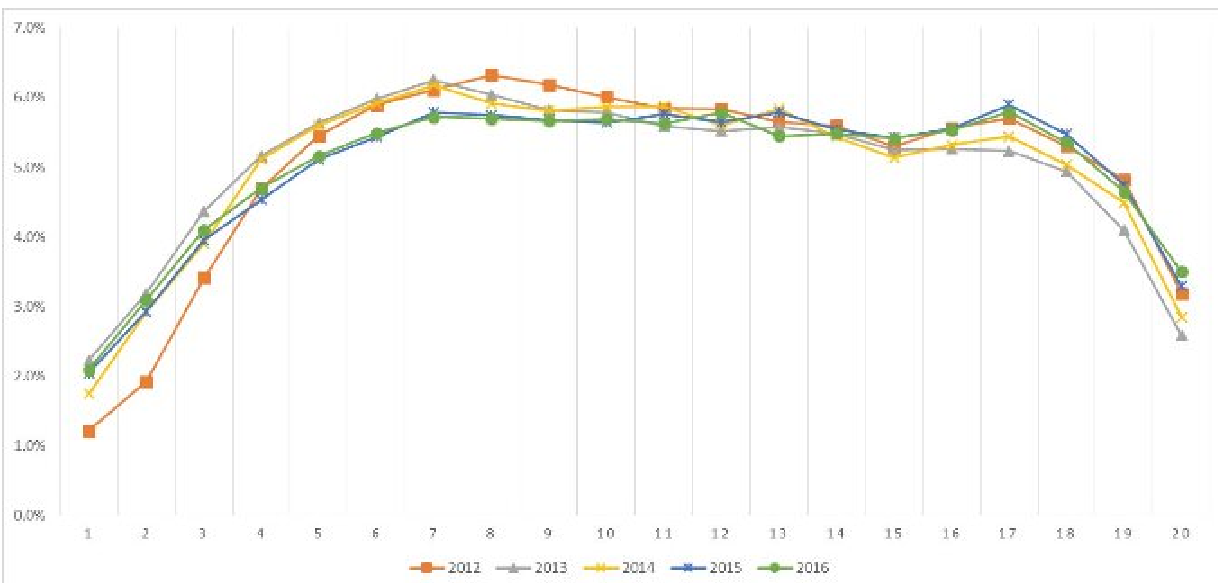
Customers

Our business is not dependent on any single customer or a few customers, the loss of which would have a material adverse effect on the respective market or on us as a whole. No individual customer accounted for more than 10% of our consolidated 2016 revenue.

Seasonality

Our direct-to-home sales are seasonal in nature with a substantial majority of our new subscriber originations occurring during a sales season from April through August. We make investments in the recruitment of our direct-to-home sales force and the inventory prior to each sales season. We experience increases in net subscriber acquisition costs during these time periods.

The management of our sales channels has historically resulted in a consistent sales pattern that enables us to more accurately forecast subscriber originations. The chart below depicts the percentage of new subscribers originated through our direct-to-home sales channel each week of the April through August sales season from 2012 through 2016 .



Segment Information

We conduct business through one segment, Vivint. Historically, we primarily operated in three geographic regions: United States, Canada and New Zealand. During the year ended December 31, 2016, we sold all of our New Zealand subscriber contracts and ceased operations in the geographical region. Historically, our operations in New Zealand were considered immaterial and reported in conjunction with the United States. See Note 15 in the accompanying consolidated financial statements for more information about our business and geographic segments.

Employees

As of December 31, 2016 , we had approximately 4,300 full-time employees, excluding our seasonal direct-to-home installation technicians, sales representatives and certain other support professionals. None of our employees are currently represented by labor unions or trade councils. We believe that we generally have good relationships with our employees. The majority of our employees are located in the Salt Lake City metropolitan area. Employees located outside of the Salt Lake City metropolitan area are comprised primarily of our SHPs, who service our subscribers and are located in all states in the United States except Maine and Vermont and all Canadian provinces except Quebec, and the monitoring professionals located at our monitoring station in Minnesota.

Corporate Information

APX Group Holdings, Inc. was incorporated under the laws of the state of Delaware on October 26, 2012. Our principal executive offices are located at 4931 North 300 West, Provo, Utah 84604 and our telephone number is (801) 377-9111.

ITEM 1A. RISK FACTORS

You should carefully consider the following risk factors and all other information contained in this annual report on Form 10-K. The risks and uncertainties described below are not the only risks facing us. Additional risks and uncertainties that we are unaware of, or those we currently deem immaterial, also may become important factors that affect us. The following risks could materially and adversely affect our business, financial condition, cash flows or results of operations.

Risks Related To Our Business

Our industry is highly competitive.

We operate in a highly competitive industry. We face competition from large residential security companies that have or may have greater capital and other resources than us. We also face, and may in the future face, competition from other providers of information and communication products and services, including cable and telecommunications companies, Internet service providers, large technology companies and others, that may have greater capital and resources than us. Competitors that are larger in scale and have greater resources may benefit from greater economies of scale and other lower costs that permit them to offer more favorable terms to consumers (including lower service costs) than we offer, causing such consumers to choose to enter into contracts with such competitors. For instance, cable and telecommunications companies are expanding into the smart home and security industries and are bundling their existing offerings with automation and monitored security services. In some instances, it appears that certain components of such bundled offerings are significantly underpriced and, in effect, subsidized by the rates charged for the other product or services offered by these companies. These pricing alternatives may influence subscribers' desire to subscribe to our services at rates and fees we consider appropriate. These competitors may also benefit from greater name recognition and superior advertising, marketing, promotional and other resources. To the extent that such competitors utilize any competitive advantages in markets where our business is more highly concentrated, the negative impact on our business may increase over time. In addition to potentially reducing the number of new subscribers we are able to originate, increased competition could also result in increased subscriber acquisition costs and higher attrition rates that would negatively impact us over time. The benefit offered to larger competitors from economies of scale and other lower costs may be magnified by an economic downturn in which subscribers put a greater emphasis on lower cost products or services. In addition, we face competition from regional competitors that concentrate their capital and other resources in targeting local markets.

We also face potential competition from improvements in do-it-yourself ("DIY") systems, which enable consumers to install their own systems and monitor and control their home environment through the Internet, text messages, emails or similar communications, without third-party involvement or the need for a subscription agreement. Continued pricing pressure or improvements in technology and shifts in consumer preferences towards DIY systems could adversely impact our subscriber base or pricing structure and have a material and adverse effect on our business, financial condition, results of operations and cash flows.

Cable and telecommunications companies actively targeting the smart home market and expanding into the monitored security space, and large technology companies expanding into the smart home market could result in pricing pressure, a shift in customer preferences towards the services of these companies and a reduction in our market share. Continued pricing pressure from these competitors or failure to achieve pricing based on the competitive advantages previously identified above could prevent us from maintaining competitive price points for our products and services resulting in lost customers or in our inability to attract new customers and have an adverse effect on our business, financial condition, results of operations and cash flows.

We rely on long-term retention of subscribers and subscriber attrition can have a material adverse effect on our results.

We incur significant upfront costs to originate new subscribers. Accordingly, our long-term performance is dependent on our subscribers remaining with us for several years after the initial 36 to 60 month term of their contracts. A significant reason for attrition occurs when subscribers move and do not reconnect. Subscriber moves are impacted by changes in the housing market. See "—Our business is subject to macroeconomic and demographic factors that may negatively impact our results of operations." Some other factors that can increase subscriber attrition include problems experienced with the quality of our products or services, unfavorable general economic conditions, adverse publicity and the preference for lower pricing of competitors' products and services. If we fail to retain our subscribers for a sufficient period of time, our profitability, business, financial condition, results of operations and cash flows could be materially and adversely affected. Our inability to retain subscribers for a long term could materially and adversely affect our business, financial condition, cash flows or results of operations.

In addition, we amortize or depreciate our capitalized subscriber acquisition costs based on the estimated life of the subscriber relationship. If attrition rates rise significantly, we may be required to accelerate the amortization of expenses or the depreciation of assets related to such subscribers or to impair such assets, which could adversely impact our reported GAAP financial results.

Litigation, complaints or adverse publicity could negatively impact our business, financial condition and results of operations.

From time to time, we engage in the defense of, and may in the future be subject to, certain investigations, claims and lawsuits arising in the ordinary course of our business. For example, we have been named as defendants in putative class actions alleging violations of wage and hour laws, the Telephone Consumer Protection Act, common law privacy and consumer protection laws. From time to time our subscribers have communicated and may in the future communicate complaints to organizations such as the Better Business Bureau, regulators, law enforcement or the media. Any resulting actions or negative subscriber sentiment or publicity could reduce the volume of our new subscriber originations or increase attrition of existing subscribers. Any of the foregoing may materially and adversely affect our business, financial condition, cash flows or results of operations.

Given our relationship with Vivint Solar and the fact that Vivint Solar uses our registered trademark, "Vivint", in its name pursuant to a licensing agreement, our subscribers and potential subscribers may associate us with any problems experienced with Vivint Solar or adverse publicity related to Vivint Solar's business. Because we have no control over Vivint Solar, we may not be able to take remedial action to cure any issues Vivint Solar has with its customers, and our trademark, brand and reputation may be adversely affected.

We are highly dependent on our ability to attract, train and retain an effective sales force and other key personnel.

Our business is highly dependent on our ability to attract, train and retain an effective sales force, especially for our peak April through August sales season. In addition, because sales representatives become more productive as they gain experience, retaining those individuals is very important for our success. If we are unable to attract, train and retain an effective sales force, our business, financial condition, cash flows or results of operations could be adversely affected. In addition, our business is dependent on our ability to attract and retain other key personnel in other critical areas of our business. If we are unable to attract and retain key personnel in our business, it could adversely affect our business, financial condition, cash flows and results of operations.

Our operations depend upon telecommunication services providers to transmit signals to and from our subscribers.

Our operations depend upon third-party cellular and other telecommunications providers to communicate signals to and from our subscribers in a timely, cost-efficient and consistent manner. The failure of one or more of these providers to transmit and communicate signals in a timely manner could affect our ability to provide services to our subscribers. There can be no assurance that third-party telecommunications providers and signal-processing centers will continue to transmit and communicate signals to or from our third-party providers and the monitoring stations without disruption. Any such disruption, particularly one of a prolonged duration, could have a material adverse effect on our business. In addition, failure to renew contracts with existing providers or to contract with other providers on commercially acceptable terms or at all may adversely impact our business.

Certain elements of our operating model have historically relied on our subscribers' continued selection and use of traditional landline telecommunications to transmit signals to and from our subscribers. There is a growing trend for consumers to switch to the exclusive use of cellular, satellite or Internet communication technology in their homes, and telecommunication providers may discontinue their landline services in the future. In addition, many of our subscribers who use cellular communication technology for their systems use products that rely on older 2G technology, and certain telecommunication providers have discontinued 2G services in certain markets, and these and other telecommunication providers are expected to discontinue 2G services in other markets in the future. The discontinuation of landline, 2G and any other services by telecommunications providers in the future would require our subscriber's system to be upgraded to alternative, and potentially more expensive, technologies. This could increase our subscriber attrition rates and slow our new subscriber originations. To maintain our subscriber base that uses components that are or could become obsolete, we may be required to upgrade or implement new technologies, including by offering to subsidize the replacement of subscribers' outdated systems at our expense. Any such upgrades or implementations could require significant capital expenditures and also divert management's attention and other important resources away from our customer service and new subscriber origination efforts.

Our interactive services are accessed through the Internet and our security monitoring services are increasingly delivered using Internet technologies. In addition, our distributed cloud storage solution, including the Vivint Smart Drive, is dependent upon Internet services for shared storage. Some providers of broadband access may take measures that affect their customers' ability to use these products and services, such as degrading the quality of the data packets we transmit over their lines, giving those packets low priority, giving other packets higher priority than ours, blocking our packets entirely or attempting to charge their customers more for using our services or terminating the customer's contract. There continues to be some uncertainty regarding whether suppliers of broadband Internet access in the U.S. have a legal obligation to allow their customers to access services such as ours without interference. In addition, the Federal Communications Commission ("FCC") recently adopted net neutrality rules that may impact some aspects of our business. Because these rules are new, we do not yet know the impact they may have on our business. Interference with our services or higher charges to customers by broadband service providers for using our products and services could cause us to lose existing subscribers, impair our ability to attract new subscribers and materially and adversely affect our business, financial condition, results of operations and cash flows.

In addition, telecommunication service providers are subject to extensive regulation in the markets where we operate or may expand in the future. Changes in the applicable laws or regulations affecting telecommunication services could require us to change the way we operate, which could increase costs or otherwise disrupt our operations, which in turn could adversely affect our business, financial condition, cash flows or results of operations.

We must successfully upgrade and maintain our information technology systems.

We rely on various information technology systems to manage our operations. We are currently implementing modifications and upgrades to these systems, and have replaced certain of our legacy systems with successor systems with new functionality.

There are inherent costs and risks associated with modifying or changing these systems and implementing new systems, including potential disruption of our internal control structure, substantial capital expenditures, additional administration and operating expenses, retention of sufficiently skilled personnel to implement and operate the new systems, demands on management time and other risks and costs of delays or difficulties in transitioning to new systems or of integrating new systems into our current systems. For example, we encountered issues associated with the implementation of our integrated CRM system in 2014, which resulted in an immaterial error in our financial statements for the quarter ended June 30, 2014. This error was corrected during the quarter ended September 30, 2014. As a result of the issues encountered associated with the CRM implementation, we also issued a significant number of billing-related subscriber credits during the year ended December 31, 2014, which reduced our revenue. While management makes efforts to identify and remediate issues, we can provide no assurance that our remediation efforts will be successful or that we will not encounter additional issues as we complete the implementation of these and other systems. In addition, our information technology system implementations may not result in productivity improvements at a level that outweighs the costs of implementation, or at all. The implementation of new information technology systems may also cause disruptions in our business operations and have an adverse effect on our business, cash flows and operations.

Privacy and data protection laws, privacy or data breaches, or the loss of data could have a material adverse effect on our business.

In the course of our operations, we gather, process, transmit and store subscriber information, including personal, payment, credit and other confidential and private information. We use some of this information for operational and marketing purposes in accordance with our privacy and data protection policies. We also rely on proprietary and commercially available systems, software, tools and monitoring to protect against unauthorized use or access of such information.

Our collection, retention, transfer and use of this information are regulated by privacy and data protection laws and regulations, industry standards and protocols. Our compliance with these various requirements increases our operating costs, and additional laws, regulations, standards or protocols (or new interpretations of existing laws and regulations) in these areas may further increase our operating costs and adversely affect our ability to effectively market our products and services. Our failure to comply with any of these laws, regulations, standards or protocols could result in a loss of subscriber data, fines, sanctions and other liabilities and additional restrictions on our collection, transfer or use of subscriber data. In addition, our failure to comply with any of these laws, regulations, standards or protocols could result in a material adverse effect on our reputation, subscriber attrition, new subscriber origination, financial condition, cash flows or results of operations.

Criminals and other nefarious actors are using increasingly sophisticated methods, including cyber-attacks, to capture or alter various types of information relating to subscribers, to engage in illegal activities such as fraud and identity theft, and to expose and exploit potential security and privacy vulnerabilities in corporate systems and web sites. Unauthorized intrusion into the portions of our systems and data storage devices that process and store subscriber confidential and private information, or the loss of such information, may result in negative consequences. In addition, third parties, including our partners and vendors, could also be a source of security risk to us in the event of a failure of their own security systems and infrastructure. Moreover, we cannot be certain that advances in criminal capabilities, new discoveries in the field of cryptography or other developments will not compromise or breach the technology protecting the networks that access our products and services. Any such compromises or breaches to the systems or loss of data, whether by us, our partners and vendors, or other third parties or as a result of employee error or malfeasance or otherwise, could cause interruptions in operations and damage to our reputation, subject us to costs and liabilities and materially and adversely affect sales, revenues and profits, which in turn could have a material adverse impact on our business, financial condition, cash flows or results of operations.

We are subject to payment related risks.

We accept payments using a variety of methods, including credit card, debit card, direct debit from customer's bank account, and consumer invoicing. For existing and future payment options we offer to our customers, we may become subject to additional regulations, compliance requirements, and fraud. For certain payment methods, including credit and debit cards, we pay interchange and other fees, which may increase over time and raise our operating costs and lower profitability. We rely on third parties to provide payment-processing services, including the processing of credit cards, debit cards, and electronic checks, and it could disrupt our business if these companies become unwilling or unable to provide these services to us. We are also subject to payment card association operating rules, including data security rules, certification requirements, and rules governing electronic funds transfers, which could change or be reinterpreted to make it difficult or impossible for us to comply. If we fail to comply with these rules or requirements, or if our data security systems are breached or compromised, we may be liable for card issuing banks' costs, subject to fines and higher transaction fees, and lose our ability to accept credit and debit card payments from our customers, process electronic funds transfers, or facilitate other types of online payments, and our business and operating results could be adversely affected. See "—Privacy and data protection laws, privacy or data breaches, or the loss of data could have a material adverse effect on our business."

We may fail to obtain or maintain necessary licenses or otherwise fail to comply with applicable laws and regulations.

Our business is subject to a variety of laws, regulations and licensing requirements and may become subject to additional such requirements in the future. In certain jurisdictions, we are also required to obtain licenses or permits to comply with standards governing installation or servicing of subscribers, monitoring station employee selection and training and to meet certain standards in the conduct of our business. Although we believe we are in material compliance with all applicable laws, regulations, and licensing requirements, in the event that these laws, regulations or licensing requirements change, we may be required to modify our operations or to utilize resources to maintain compliance with such laws and regulations. Our failure to comply with such laws, regulations or licensing requirements as may be in effect from time to time could have a material adverse effect on us.

If we expand the scope of our products or services, or our operations in new markets, we may be required to obtain additional licenses and otherwise maintain compliance with additional laws, regulations or licensing requirements.

New laws, regulations or licensing requirements may be enacted that could have an adverse effect on us. For example, certain U.S. municipalities have adopted, or are considering adopting, laws, regulations or policies aimed at reducing the number of false alarms, including: (i) subjecting companies to fines or penalties for transmitting false alarms, (ii) imposing fines on subscribers for false alarms, or (iii) imposing limitations on law enforcement response. These measures could adversely affect our future operations and business by increasing our costs, reducing customer satisfaction or affecting the public perception of the effectiveness of our products and services. In addition, federal, state and local governmental authorities have considered, and may in the future consider, implementing consumer protection rules and regulations, which could impose significant constraints on our sales channels.

Regulations have been issued by the Federal Trade Commission (“FTC”), FCC, and Canadian Radio-Television and Telecommunications Commission (“CRTC”) that place restrictions on direct-to-home marketing, telemarketing, email marketing and general sales practices. These restrictions include, but are not limited to, limitations on methods of communication, requirements to maintain a “do not call” list, cancellation rights and required training for personnel to comply with these restrictions. The CRTC has enforcement authority under the Canadian Anti-Spam Law (“CASL”), which prohibits the sending of commercial emails without prior consent of the consumer or an existing business relationship and sets forth rules governing the sending of commercial emails. CASL allows for a private right of action for the recovery of damages or provides for enforcement by CRTC permitting the recovery of significant civil penalties, costs and attorneys’ fees in the event that regulations are violated. Changes in regulations or the interpretation of such regulations could have a material adverse effect on our business, financial condition, cash flows or results of operations.

Increased adoption of laws purporting to characterize certain charges in our subscriber contracts as unlawful, may adversely affect our operations.

If a subscriber cancels prior to the end of the initial term of the contract, other than in accordance with the contract, we may, under the terms of the subscriber contract, charge the subscriber the amount that would have been paid over the remaining term of the contract. Several states have adopted, or are considering adopting, laws restricting the charges that can be imposed upon contract cancellation prior to the end of the initial contract term. Such initiatives could negatively impact our business and have a material adverse effect on our business, financial condition, cash flows or results of operations. Adverse rulings regarding these matters could increase legal exposure to subscribers against whom such charges have been imposed and the risk that certain subscribers may seek to recover such charges from us through litigation or otherwise. In addition, the costs of defending such litigation and enforcement actions could have an adverse effect on our business, financial condition, cash flows or results of operations.

Our new products and services may not be successful.

We launched our smart home products and services in April 2011. We launched our wireless Internet service on a limited basis during 2013 and our proprietary Vivint Smart Home Cloud solution and new SkyControl panel in early 2014. In 2014, we also began offering a distributed cloud storage solution, including the Vivint Smart Drive, on a limited basis. In 2015, we launched our doorbell camera. We anticipate launching additional products and services in the future. These products and services and the new products and services we may launch in the future may not be well-received by our subscribers, may not help us to generate new subscribers, may adversely affect the attrition rate of existing subscribers, increase our subscriber acquisition costs and increase the costs to service our subscribers. For example, during the year ended December 31, 2015 we recorded restructuring and asset impairment charges for our Wireless Internet business totaling $59.2 million, which included $53.2 million of asset impairment charges related to write downs of our network assets, subscriber acquisition costs, certain intellectual property and goodwill and $6.0 million in restructuring charges related to employee severance and termination benefits as well as write offs of certain vendor contracts. Any profits we may generate from these or other new products or services may be lower than profits generated from our other products and services and may not be sufficient for us to recoup our development or subscriber acquisition costs incurred. New products and services may also have lower gross margins, particularly to the extent that they do not fully utilize our existing infrastructure. In addition, new products and services may require increased operational expenses or subscriber acquisition costs and present new and difficult technological and intellectual property challenges that may subject us to claims or complaints if subscribers experience service disruptions or failures or other quality issues. To the extent our new products and services are not successful, it could have a material adverse effect on our business, financial condition, cash flows or results of operations.

Our recently announced Vivint Flex Pay plan is a new business model that may subject us to additional risks.

In January, 2017, we announced the introduction of the “Vivint Flex Pay” plan. Under this plan, we (i) will launch the Consumer Financing Program pursuant to which we will offer to our qualified customers an opportunity to finance the purchase of Products used in connection with our smart home and security services and (ii) have begun to offer RICs with respect to the purchase of Products to certain of our customers who will not qualify for the Consumer Financing Program. Under the Vivint Flex Pay plan, customers pay separately for the Products and Vivint’s smart home and security services. We began offering RICs in the first quarter of fiscal 2017. Alternatively, customers are able to purchase the Products with cash or credit card.

There can be no assurance that the Vivint Flex Pay plan will be successful. If this plan is not favorably received by customers or is otherwise not performing as intended by us, it could have an adverse effect on our business, subscriber growth rate, financial condition and results of operations. In addition, reductions in consumer lending and/or the availability of consumer credit under the Vivint Flex Pay plan could limit the number of customers with the financial means to purchase the Products and thus limit the number of customers who are able to subscribe to our smart home and security services. There is no assurance that our exclusive provider of installment loans, Citizens Bank, N.A. ("Citizens"), or other companies will continue to provide customers with access to credit or that credit limits under such arrangements will be sufficient. Such restrictions or limitations on the availability of consumer credit or unfavorable reception of the Vivint Flex Pay plan by potential customers could have a material adverse impact on our business, results of operations, financial condition and cash flows.

In addition, the Vivint Flex Pay plan subjects us to additional regulatory requirements and compliance obligations. We may face the risk of increased consumer complaints, potential supervision, examinations or enforcement actions by federal and state licensing and regulatory agencies and/or penalties for violation of financial services, consumer protections and other applicable laws and regulations. We will also offer RICs to our Canadian customers, and as a result will be subject to additional regulatory requirements in Canada. In the future, we may elect to offer installment loans and other financial services products similar to the Consumer Financing Program directly to qualified customers. If we elect to offer such financial services directly, this may further expand our regulatory and compliance obligations.

The technology we employ may become obsolete, which could require significant capital expenditures.

Our industry is subject to continual technological innovation. Our products and services interact with the hardware and software technology of systems and devices located at our subscribers' property. We may be required to implement new technologies or adapt existing technologies in response to changing market conditions, subscriber preferences, industry standards or inability to secure necessary intellectual property licenses, which could require significant capital expenditures. It is also possible that one or more of our competitors could develop a significant technical advantage that allows them to provide additional or superior products or services, or to lower their price for similar products or services, that could put us at a competitive disadvantage. Our inability to adapt to changing technologies, market conditions or subscriber preferences in a timely manner could have a material adverse effect on our business, financial condition, cash flows or results of operations.

Our future operating and financial results are uncertain.

Prior growth rates in revenues and other operating and financial results should not be considered indicative of our future performance. Our future performance and operating results depend on, among other things: (i) our ability to renew and/or upgrade contracts with existing subscribers and maintain customer satisfaction with existing subscribers; (ii) our ability to generate new subscribers, including our ability to scale the number of new subscribers generated through inside sales and other channels; (iii) our ability to increase the density of our subscriber base for existing service locations or continue to expand into new geographic markets; (iv) our ability to successfully develop and market new and innovative products and services; (v) the level of product, service and price competition; (vi) the degree of saturation in, and our ability to further penetrate, existing markets; (vii) our ability to manage growth, revenues, origination or acquisition costs of new subscribers and attrition rates, the cost of servicing our existing subscribers and general and administrative costs; and (viii) our ability to attract, train and retain qualified employees. If our future operating and financial results suffer as a result of any of the other reasons mentioned above, or any other reasons, there could be a material adverse effect on our business, financial condition, cash flows or results of operations.

Our business is subject to macroeconomic, microeconomic and demographic factors that may negatively impact our results of operations.

Our business is generally dependent on national, regional and local economic conditions. Historically, both the U.S. and worldwide economies have experienced cyclical economic downturns, some of which have been prolonged and severe. These economic downturns have generally coincided with, and contributed to, increased energy costs, concerns about inflation, slower economic activity, decreased consumer confidence and spending, reduced corporate profits and capital spending, adverse business conditions and liquidity concerns. These conditions and concerns result in a decline in business and consumer confidence and increased unemployment.

Where disposable income available for discretionary spending is reduced (due to, for example, higher housing, energy, interest or other costs or where the perceived wealth of subscribers has decreased) and disruptions in the financial markets adversely impact the availability and cost of credit, our business may experience increased attrition rates, a reduced ability to originate new subscribers and reduced consumer demand.

For instance, recoveries in the housing market increase the occurrence of relocations which may lead to subscribers disconnecting service and not contracting with us in their new homes. We cannot predict the timing or duration of any economic slowdown or the timing or strength of a subsequent economic recovery, worldwide, or in the specific markets where our subscribers are located.

Furthermore, any deterioration in new construction and sales of existing single-family homes could reduce opportunities to originate new subscribers and increase attrition among our existing subscribers. Such downturns in the economy in general, and the housing market in particular may negatively affect our business.

In addition, unfavorable shifts in population and other demographic factors may cause us to lose subscribers as people migrate to markets where we have little or no presence, or if the general population shifts into a less desirable age, geographic or other demographic group from our business perspective.

Our inside sales channel depends on third parties and other sources that we do not control to generate leads that we then convert into subscribers. If our third party partners and lead generators are not successful in generating leads for our inside sales channel, if the quality of those leads deteriorates, or if we are unable to generate leads through other sources that are cost effective and successfully convert into customers, it could have a material adverse effect on our financial condition, cash flows or and results of operations.

Also, our subscribers consist largely of homeowners, who are subject to economic, credit, financial and other risks, as applicable. These risks could materially and adversely affect a subscriber's ability to make required payments to us on a timely basis. Any such decrease or delay in subscriber payments may have a material adverse effect on us. As a result of financial distress, subscribers may apply for relief under bankruptcy and other laws relating to creditors' rights. In addition, subscribers may be subject to involuntary application of such bankruptcy and other laws relating to creditors' rights. The bankruptcy of a subscriber could adversely affect our ability to collect payments, to protect our rights, and otherwise realize the value of our contract with the subscriber. This may occur as a result of, among other things, application of the automatic stay, delays and uncertainty in the bankruptcy process and potential rejection of such subscriber contracts. Our subscribers' inability to pay, whether as a result of economic or credit issues, bankruptcy or otherwise, could have a material adverse effect on our financial condition, cash flows or and results of operations.

The outcome of the U.S. presidential election and the policies of the incoming administration may impact our business, financial condition and results of operations.

On January 20, 2017, Donald J. Trump became president of the United States. While it is uncertain at this time how the results of the U.S. 2016 presidential and other elections could affect our business, President Trump has questioned certain existing and proposed trade agreements, such as the North American Free Trade Agreement, and withdrawn from others such as the Trans-Pacific Partnership. President Trump has also raised the possibility of greater restrictions on trade generally and significant increases on tariffs on goods imported into the United States, particularly from China.

Changes in U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment could adversely affect our business. For example, the imposition of tariffs or other trade barriers with other countries, particularly with China, could increase our costs and reduce the competitiveness of our product and service offerings. In addition, according to publicly released statements, a top legislative priority of the Trump administration and the next Congress may be significant reform of the Internal Revenue Code of 1986, as amended, including significant changes to taxation of business entities and the deductibility of interest expense.

While there is currently a substantial lack of clarity around the likelihood, timing and details of any such policies and reforms, such policies and reforms may materially and adversely affect our business, financial condition and results of operations and the value of its securities.

We depend on a limited number of suppliers to provide our products and services. Our product suppliers, in turn, rely on a limited number of suppliers to provide significant components and materials used in our products. A change in our existing preferred supply arrangements or a material interruption in supply of products or third party services could increase our costs or prevent or limit our ability to accept and fill orders for our products and services.

We provide our services through a panel installed at the premises of our subscribers. As of December 31, 2016 , approximately 57% of our installed panels were SkyControl panels, 40% were 2GIG Go!Control panels, and 3% were other panels. Since early 2014, our primary panel installed is the SkyControl panel. The 2GIG Go!Control panel was our primary panel for subscribers from 2010 through early 2014. In fiscal 2013, we completed the 2GIG Sale. In connection with the 2GIG

Sale, we retained sole ownership of the intellectual property and exclusive rights with respect to the SkyControl panel and certain peripheral equipment. The proprietary equipment is a critical component of our current product and service offerings and we expect it to remain a critical component of our future service offerings. In addition, we entered into a five-year supply agreement with 2GIG, pursuant to which they are the exclusive provider of our control panel requirements, subject to certain exceptions. Upon the expiration or earlier termination of the initial term of this supply agreement, there can be no assurance that we will be able to renew our supply arrangements with 2GIG on commercially reasonable terms or at all. Any adverse change in, or the cessation of, the relationship between us and 2GIG could expose us to a significant increase in equipment costs.

In addition to 2GIG, we obtain important components of our systems from several other suppliers. Should 2GIG or such other suppliers cease to manufacture the products we purchase from them or become unable to timely deliver these products in accordance with our requirements, or should such other suppliers choose not to do business with us, we may be required to locate alternative suppliers. In addition, any financial or other difficulties our suppliers face may have negative effects on our business. We may be unable to locate alternate suppliers on a timely basis or to negotiate the purchase of control panels or other equipment on favorable terms, if at all. In addition, our equipment suppliers, in turn, depend upon a limited number of outside unaffiliated suppliers for key components and materials used in our control panels and other equipment. If any of these suppliers cease to or are unable to provide components and materials in sufficient quantity and of the requisite quality, especially during our summer selling season when a large percentage of our new subscriber originations occur, and if there are not adequate alternative sources of supply, we could experience significant delays in the supply of control panels and other equipment. Any such delay in the supply of control panels and other equipment of the requisite quality could adversely affect our ability to originate subscribers and cause our subscribers not to continue, renew or upgrade their contracts or to choose not to purchase such products or services from us. This would result in delays in or loss of future revenues and could have a material adverse effect on our business, financial condition, cash flows or results of operations. Also, if previously installed components and materials were found to be defective, we might not be able to recover the costs associated with the recall, repair or replacement of such products, across our installed customer base, and the diversion of personnel and other resources to address such issues could have a material adverse effect on our financial condition, cash flows or results of operations.

Currency fluctuations could materially and adversely affect us and we have not hedged this risk.

Historically, a portion of our revenue has been denominated in Canadian Dollars. For the year ended December 31, 2016 , before intercompany eliminations, approximately $57.4 million , or 8% of our revenues were denominated in Canadian Dollars and as of December 31, 2016 , before intercompany eliminations, $139.4 million , or 5% of our total assets and $96.9 million , or 3% of our total liabilities were denominated in Canadian Dollars. In the future, we expect to continue generating revenue denominated in Canadian Dollars, and other foreign currencies. Accordingly, we may be materially and adversely affected by currency fluctuations in the U.S. Dollar versus these currencies. Weaker foreign currencies relative to the U.S. Dollar may result in lower levels of reported revenues with respect to foreign currency-denominated subscriber contracts, net income, assets, liabilities and accumulated other comprehensive income on our U.S. Dollar-denominated financial statements. We have not historically hedged against this exposure. Foreign exchange rates are influenced by many factors outside of our control, including but not limited to: changing supply and demand for a particular currency, monetary policies of governments (including exchange-control programs, restrictions on local exchanges or markets and limitations on foreign investment in a country or on investment by residents of a country in other countries), changes in balances of payments and trade, trade restrictions and currency devaluations and revaluations. Also, governments may from time to time intervene in the currency markets, directly and by regulation, to influence prices directly. As such, these events and actions are unpredictable. The resulting volatility in the exchange rates for the other currencies could have a material adverse effect on our financial condition and results of operations.

We rely on certain third-party providers of licensed software and services integral to the operations of our business.

Certain aspects of the operation of our business depend on third-party software and service providers. We rely on certain software technology that we license from third parties and use in our products and services to perform key functions and provide critical functionality. For example, our subscribers with Go!Control panels utilize technology hosted by Alarm.com to access their systems remotely through a smart phone application or through web interface. With regard to licensed software technology, we are, to a certain extent, dependent upon the ability of third parties to maintain, enhance or develop their software and services on a timely and cost-effective basis, to meet industry technological standards and innovations to deliver software and services that are free of defects or security vulnerabilities, and to ensure their software and services are free from disruptions or interruptions. Further, these third-party services and software licenses may not always be available to us on commercially reasonable terms or at all.

If our agreements with third-party software or services vendors are not renewed or the third-party software or services become obsolete, fail to function properly, are incompatible with future versions of our products or services, are defective or otherwise fail to address our needs, there is no assurance that we would be able to replace the functionality provided by the third-party software or services with software or services from alternative providers. Furthermore, even if we obtain licenses to alternative software or services that provide the functionality we need, we may be required to replace hardware installed at our monitoring stations and at our subscribers' homes, including security system control panels and peripherals, to affect our integration of or migration to alternative software products. Any of these factors could have a material adverse effect on our financial condition, cash flows or results of operations.

We are highly dependent on the proper and efficient functioning of our computer, data back-up, information technology, telecom and processing systems, platform and our redundant monitoring stations.

Our ability to keep our business operating is highly dependent on the proper and efficient operation of our computer systems, information technology systems, telecom systems, data-processing systems, and subscriber software platform. Although we have redundant central monitoring facilities, back-up computer and power systems and disaster recovery tests, if there is a catastrophic event, natural disaster, security breach, negligent or intentional act by an employee or other extraordinary event, we may be unable to provide our subscribers with uninterrupted services. Furthermore, because computer and data back-up and processing systems are susceptible to malfunctions and interruptions, we cannot guarantee that we will not experience service failures in the future. A significant or large-scale malfunction or interruption of any computer or data back-up and processing system could adversely affect our ability to keep our operations running efficiently and respond to alarm system signals. We do not have a backup system for our subscriber software platform. If a malfunction results in a wider or sustained disruption, it could have a material adverse effect on our reputation, business, financial condition, cash flows or results of operations.

We are subject to unionization and labor and employment laws and regulations, which could increase our costs and restrict our operations in the future.

Currently, none of our employees are represented by a union. Attempts may be made to organize all or part of our employee base. As we continue to grow, and enter different regions, unions may make further attempts to organize all or part of our employee base. If some or all of our workforce were to become unionized, and the terms of the collective bargaining agreement were significantly different from our current compensation arrangements, it could increase our costs and adversely impact our profitability. Additionally, responding to such organization attempts could distract our management and result in increased legal and other professional fees; and, potential labor union contracts could put us at increased risk of labor strikes and disruption of our operations.

Our business is subject to a variety of employment laws and regulations and may become subject to additional such requirements in the future. Although we believe we are in material compliance with applicable employment laws and regulations, in the event of a change in requirements, we may be required to modify our operations or to utilize resources to maintain compliance with such laws and regulations. Moreover, we may be subject to various employment-related claims, such as individual or class actions or government enforcement actions relating to alleged employment discrimination, employee classification and related withholding, wage-hour, labor standards or healthcare and benefit issues. Our failure to comply with applicable employment laws and regulations and related legal actions against us, may affect our ability to compete or have a material adverse effect on our business, financial condition, cash flows or results of operations.

The loss of our senior management could disrupt our business.

Our senior management is important to the success of our business because there is significant competition for executive personnel with experience in the smart home and security industry and our sales channels. As a result of this need and the competition for a limited pool of industry-based executive experience, we may not be able to retain our existing senior management. In addition, we may not be able to fill new positions or vacancies created by expansion or turnover. Moreover, with the exception of our Chief Executive Officer, we do not and do not currently expect to have in the future "key person" insurance on the lives of any other member of our senior management. The loss of any member of our senior management team without retaining a suitable replacement (either from inside or outside our existing management team) could have a material adverse effect on our business, financial condition, cash flows or results of operations.

If we are unable to acquire necessary intellectual property or adequately protect our intellectual property, we could be competitively disadvantaged.

Our intellectual property, including our patents, trademarks, copyrights, trade secrets, and other proprietary rights, constitutes a significant part of our value. Our success depends, in part, on our ability to protect our intellectual property against dilution, infringement and competitive pressure by defending our intellectual property rights. To protect our intellectual property rights, we rely on a combination of patent, trademark, copyright and trade secret laws of the U.S., Canada and other countries, as well as contract provisions. In addition, we make efforts to acquire rights to intellectual property necessary for our operations. However, there can be no assurance that these measures will be successful in any given case, particularly in those countries where the laws do not protect our proprietary rights as fully as in the U.S.

If we fail to acquire necessary intellectual property rights or adequately protect or assert our intellectual property rights, competitors may dilute our brands or manufacture and market similar products and services or convert our subscribers, which could adversely affect our market share and results of operations. We may not receive patents or trademarks for all our pending patent and trademark applications, and existing or future patents or licenses may not provide competitive advantages for our products and services. Our competitors may challenge, invalidate or avoid the application of our existing or future intellectual property rights that we receive or license. In addition, patent rights may not prevent our competitors from developing, using or selling products or services that are similar to or address the same market as our products and services. The loss of protection for our intellectual property rights could reduce the market value of our brands and our products and services, reduce new subscriber originations or upgrade sales to existing subscribers, lower our profits, and could have a material adverse effect on our business, financial condition, cash flows or results of operations.

From time to time, we are subject to claims for infringing the intellectual property rights of others, and will be subject to such claims in the future, which could have an adverse effect on our business and operations.

We cannot be certain that our products and services or those of third parties that we incorporate into our offerings do not and will not infringe the intellectual property rights of others. We have been in the past, and may be in the future, subject to claims based on allegations of infringement or other violations of the intellectual property rights of others, including litigation brought by special purpose or so-called “non-practicing” entities that focus solely on extracting royalties and settlements by enforcing intellectual property rights. Regardless of their merits, intellectual property claims divert the attention of our personnel and are often time-consuming and expensive. In addition, to the extent claims against us are successful, we may have to pay substantial monetary damages or discontinue or modify certain products or services that are found to infringe another party’s rights or enter into licensing agreements with costly royalty payments. We have in the past and will continue in the future to seek one or more licenses to continue offering certain products or services, which could have a material adverse effect on our business, financial condition, cash flows or results of operations.

In the past, we have identified material weaknesses in our internal control over financial reporting. If we fail to maintain effective internal control over financial reporting at a reasonable assurance level, we may not be able to accurately report our financial results, which could have a material adverse effect on our operations, investor confidence in our business and the trading prices of our securities.

In connection with the preparation and audit of our consolidated financial statements for the year ended December 31, 2014, we along with our independent registered public accounting firm identified a material weakness in the internal control over our financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of a company’s annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness we identified related to deficiencies in the completeness and effectiveness of our Information Technology General Control (“ITGC”) environment and the controls associated with our year end financial close process, including review of the classification of items within the statement of cash flows. The deficiencies with our year end financial close process, included insufficient reviews of account reconciliations and journal entries, resulting in a number of audit adjustments, primarily in the areas of (1) capitalized subscriber acquisition costs, (2) inventory and (3) accrued expenses. The deficiencies also resulted in a restatement of our consolidated statements of cash flows for the years ended December 31, 2014 and 2013 and the periods from November 17, 2012 through December 31, 2012 (“Successor”) and January 1, 2011 through November 16, 2012 (“Predecessor”).

We believe we have fully remediated this material weakness related to the controls in our financial statement close process. The remediation included, but was not limited to, expanding technical accounting skill sets, enhancing reconciliation and review procedures, and adding additional information technology system related controls.

If additional material weaknesses in our internal controls are discovered in the future, they may adversely affect our ability to record, process, summarize and report financial information timely and accurately and, as a result, our financial statements may contain material misstatements or omissions.

In addition, it is possible that control deficiencies could be identified by our management or by our independent registered public accounting firm in the future or may occur without being identified. Such a failure could result in regulatory scrutiny, and cause investors to lose confidence in our reported financial condition, lead to a default under our indebtedness and otherwise have a material adverse effect on our business, financial condition, cash flow or results of operations.

Product or service defects or shortfalls in customer service could have an adverse effect on us.

Our inability to provide products, services or customer service in a timely manner or defects with our products or services, including products and services of third parties that we incorporate into our offerings, could adversely affect our reputation and subject us to claims or litigation. In addition, our inability to meet subscribers' expectations with respect to our products, services or customer service could increase attrition rates or affect our ability to generate new subscribers and thereby have a material adverse effect on our business, financial condition, cash flow or results of operations.

We are exposed to greater risk of liability for employee acts or omissions or system failure, than may be inherent in other businesses

The nature of the products and services we provide potentially exposes us to greater risks of liability for employee acts or omissions or system failures than may be inherent in other businesses. If subscribers believe that they incurred losses as a result of our action or inaction, the subscribers (or their insurers) have and could in the future bring claims against us. Although our service contracts contain provisions limiting our liability for such claims, no assurance can be given that these limitations will be enforced, and the costs of such litigation or the related settlements or judgments could have a material adverse effect on our financial condition. In addition, there can be no assurance that we are adequately insured for these risks. Certain of our insurance policies and the laws of some states may limit or prohibit insurance coverage for punitive or certain other types of damages or liability arising from gross negligence. If significant uninsured damages are assessed against us, the resulting liability could have a material adverse effect on our business, financial condition, cash flows or results of operations.

Future transactions could pose risks.

We frequently evaluate strategic opportunities both within and outside our existing lines of business. We expect from time-to-time to pursue additional business opportunities and may decide to eliminate or acquire certain businesses, products or services. For example, in August 2014, we acquired Space Monkey, a distributed cloud storage technology solution company. Such acquisitions or dispositions could be material. There are various risks and uncertainties associated with potential acquisitions and divestitures, including: (i) availability of financing; (ii) difficulties related to integrating previously separate businesses into a single unit, including product and service offerings, distribution and operational capabilities and business cultures; (iii) general business disruption; (iv) managing the integration process; (v) diversion of management's attention from day-to-day operations; (vi) assumption of costs and liabilities of an acquired business, including unforeseen or contingent liabilities or liabilities in excess of the amounts estimated; (vii) failure to realize anticipated benefits and synergies, such as cost savings and revenue enhancements; (viii) potentially substantial costs and expenses associated with acquisitions and dispositions; (ix) failure to retain and motivate key employees; and (x) difficulties in applying our internal control over financial reporting and disclosure controls and procedures to an acquired business. Any or all of these risks and uncertainties, individually or collectively, could have material adverse effect on our business, financial condition, cash flow or results of operations. We can offer no assurance that any such strategic opportunities will prove to be successful. Among other negative effects, our pursuit of such opportunities could cause our cost of investment in new subscribers to grow at a faster rate than our recurring revenue and fees collected at the time of installation. Additionally, any new product or service offerings could require developmental investments or have higher cost structures than our current arrangements, which could reduce operating margins and require more working capital

Goodwill and other identifiable intangible assets represent a significant portion of our total assets, and we may never realize the full value of our intangible assets.

As of December 31, 2016 , we had approximately $1.3 billion of goodwill and identifiable intangible assets, excluding deferred financing costs. Goodwill and other identifiable intangible assets are recorded at fair value on the date of acquisition. In addition, as of December 31, 2016 , we had $1,052.4 million of subscriber acquisition costs, net. We review such assets for impairment at least annually. Impairment may result from, among other things, deterioration in performance, adverse market conditions, adverse changes in applicable laws or regulations, including changes that restrict the activities of or affect the products and services we offer, challenges to the validity of certain intellectual property, reduced sales of certain products or services incorporating intellectual property, increased attrition and a variety of other factors. The amount of any quantified impairment must be expensed immediately as a charge to results of operations. Depending on future circumstances, it is possible that we may never realize the full value of our intangible assets. Any future determination of impairment of goodwill or other identifiable intangible assets could have a material adverse effect on our financial position and results of operations.

Insurance policies may not cover all of our operating risks and a casualty loss beyond the limits of our coverage could negatively impact our business.

We are subject to all of the operating hazards and risks normally incidental to the provision of our products and services and business operations. In addition to contractual provisions limiting our liability to subscribers and third parties, we maintain insurance policies in such amounts and with such coverage and deductibles as required by law and that we believe are reasonable and prudent. See "—We are exposed to greater risk of liability for employee acts or omissions or system failure, than may be inherent in other businesses." Nevertheless, such insurance may not be adequate to protect us from all the liabilities and expenses that may arise from claims for personal injury, death or property damage arising in the ordinary course of our business and current levels of insurance may not be able to be maintained or available at economical prices. If a significant liability claim is brought against us that is not covered by insurance, then we may have to pay the claim with our own funds, which could have a material adverse effect on our business, financial condition, cash flows or results of operations.

Our business is concentrated in certain markets.

Our business is concentrated in certain markets. As of December 31, 2016 , subscribers in Texas and California represented approximately 18% and 8% , respectively, of our total subscriber base. Accordingly, our business and results of operations are particularly susceptible to adverse economic, weather and other conditions in such markets and in other markets that may become similarly concentrated.

Catastrophic events may disrupt our business.

Unforeseen events, or the prospect of such events, including war, terrorism and other international conflicts, public health issues including health epidemics or pandemics and natural disasters such as fire, hurricanes, earthquakes, tornados or other adverse weather and climate conditions, whether occurring in the U.S., Canada or elsewhere, could disrupt our operations, disrupt the operations of suppliers or subscribers or result in political or economic instability. These events could reduce demand for our products and services, make it difficult or impossible to receive equipment from suppliers or impair our ability to deliver products and services to customers on a timely basis. Any such disruption could damage our reputation and cause subscriber attrition. We could be subject to claims or litigation with respect to losses caused by such disruptions. Our property and business interruption insurance may not cover a particular event at all or be sufficient to fully cover our losses.

If the insurance industry changes its practice of providing incentives to homeowners for the use of residential electronic security services, we may experience a reduction in new subscriber growth or an increase in our subscriber attrition rate.

Some insurers provide a reduction in premium rates for insurance policies written on homes that have monitored electronic security systems. There can be no assurance that insurance companies will continue to offer these rate reductions. If these incentives were reduced or eliminated, homeowners who otherwise may not feel the need for our products or services would be removed from our potential subscriber pool, which could hinder the growth of our business, and existing subscribers may choose to cancel or not renew their contracts, which could increase our attrition rates. In either case, our results of operations and growth prospects could be adversely affected.

The Issuer is a holding company and its principal asset is its ownership of the capital stock of its subsidiaries; accordingly, the Issuer is dependent upon distributions from its subsidiaries to make payments in respect of the notes and to pay taxes and any other expenses.

The Issuer is a holding company and its principal asset is its ownership of the capital stock of its subsidiaries. The Issuer has no independent means of generating revenue. The Issuer intends to cause its subsidiaries to make distributions to the Issuer following the consummation of the Transactions in amounts sufficient to make payments in respect of the notes and the Issuer's other outstanding indebtedness. To the extent that the Issuer needs funds and its subsidiaries are unable or otherwise restricted from making such distributions under applicable law or regulation, the Issuer's liquidity and financial condition would be adversely affected and the Issuer may be unable to satisfy its obligations under the notes or under its other indebtedness.

Affiliates of the Sponsor own substantially all of the equity interests in us and may have conflicts of interest with us or the holders of the notes in the future.

As a result of the Merger, the Sponsor owns a substantial majority of our capital stock and has the ability to elect a majority of our board of directors. As a result, affiliates of the Sponsor have control over our decisions to enter into any corporate transaction and will have the ability to prevent any transaction that requires the approval of stockholders regardless of whether holders of the notes believe that any such transactions are in their own best interests. For example, affiliates of the Sponsor could cause us to make acquisitions that increase the amount of our indebtedness or to sell assets or businesses, or could cause us to issue additional capital stock or declare dividends. So long as the Sponsor continues to indirectly own a significant amount of the outstanding shares of our common stock, affiliates of the Sponsor will continue to be able to strongly influence or effectively control our decisions. Our existing debt agreements and the credit agreement governing our revolving credit facility permit us to pay advisory and other fees, dividends and make other restricted payments to the Sponsor under certain circumstances and the Sponsor or its affiliates may have an interest in our doing so. During the year ended December 31, 2016 , we made payments to affiliates of the Sponsor of $0.9 million .

The Sponsor is in the business of making investments in companies and may from time to time acquire and hold interests in businesses that compete directly or indirectly with us or that supply us with goods and services. The Sponsor may also pursue acquisition opportunities that may be complementary to our business and, as a result, those acquisition opportunities may not be available to us. The holders of the notes should consider that the interests of the Sponsor and other Investors may differ from their interests in material respects. See “Security Ownership of Certain Beneficial Owners and Management,” “Certain Relationships and Related Party Transactions, and Director Independence,” “Description of the Notes” and “Description of Other Indebtedness.”

We have recorded net losses in the past and we may experience net losses in the future.

Although we have achieved profitability on an Adjusted EBITDA basis, we have recorded consolidated net losses in each of the previous three years ended December 31, 2016 , and we may likely continue to record net losses in future periods.

The nature of our business requires the application of complex revenue and expense recognition rules and the current legislative and regulatory environment affecting generally accepted accounting principles is uncertain. Significant changes in current principles could affect our financial statements going forward and changes in financial accounting standards or practices may cause adverse, unexpected financial reporting fluctuations and harm our operating results.

The accounting rules and regulations that we must comply with are complex and subject to interpretation by the Financial Accounting Standards Board ("FASB"), the SEC and various bodies formed to promulgate and interpret appropriate accounting principles. Recent actions and public comments from the FASB and the SEC have focused on the integrity of financial reporting and internal controls. In addition, many companies’ accounting policies are being subject to heightened scrutiny by regulators and the public. Further, the accounting rules and regulations are continually changing in ways that could materially impact our financial statements. For example, in May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606), as amended, which will supersede nearly all existing revenue recognition guidance. Although the new standard permits early adoption, the effective date of the new revenue standard is our first quarter of fiscal 2018. We do not plan to early adopt, and accordingly, we will adopt the new standard effective January 1, 2018. The new standard permits adoption either by using (i) a full retrospective approach for all periods presented in the period of adoption or (ii) a modified retrospective approach with the cumulative effect of initially applying the new standard recognized at the date of initial application and providing certain additional disclosures. We currently plan to adopt using the modified retrospective approach; however, a final decision regarding the adoption method has not been made at this time. Our final determination will depend on a number of factors such as the significance of the impact of the new standard on our financial results, system readiness and our ability to accumulate and analyze the information necessary to assess the impact on prior period financial statements, as necessary. While we continue to assess the potential impacts, under the new standards there is the potential for significant impacts to the accounting for recurring, service and other sales and activation fee revenues and accounting for subscriber acquisition costs. The application of this new guidance may result in a change in the timing and pattern of revenue recognition including the retrospective recognition of revenue in historical periods that may negatively affect our future revenue trend, which, despite no change in associated cash flows, could have a material adverse effect on our net income. We cannot predict the impact of future changes to accounting principles or our accounting policies on our financial statements going forward, which could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of the change. In addition, if we were to change our critical accounting estimates, including those related to the recognition of recurring revenue and other revenue sources, our operating results could be significantly affected.

Risks Relating to Our Indebtedness

Our substantial indebtedness could adversely affect our financial condition and prevent us from fulfilling our obligations under our indebtedness.

Net cash interest paid for the years ended December 31, 2016 and 2015 related to our indebtedness (excluding capital leases) totaled $188.1 million and $144.9 million , respectively. Our net cash used in operating activities for the years ended December 31, 2016 and 2015 , before these interest payments, was $177.6 million and $110.4 million , respectively. Accordingly, our net cash provided by operating activities for the years ended December 31, 2016 and 2015 was insufficient to cover these interest payments.

Under the terms of our existing indebtedness, we are not required to make principal payments prior to scheduled maturity. As of December 31, 2016 , we had approximately $2.5 billion aggregate principal amount of debt outstanding, which requires significant interest and principal payments. Subject to the limits contained in our existing debt agreements, we may be able to incur substantial additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, the risks related to our high level of debt could increase. Specifically, our high level of debt could have important consequences, including the following:

- making it more difficult for us to satisfy our obligations with respect to our debt;
- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or other general corporate requirements;
- requiring a substantial portion of our cash flows to be dedicated to debt service payments instead of other purposes, thereby reducing the amount of cash flows available for working capital, capital expenditures, acquisitions and other general corporate purposes;
- increasing our vulnerability to general adverse economic and industry conditions;
- exposing us to the risk of increased interest rates as certain of our borrowings are at variable rates of interest;
- limiting our flexibility in planning for and reacting to changes in the industry in which we compete;
- Limiting our ability to grow our subscriber base or otherwise requiring us to limit or adjust our operating activities;
- placing us at a disadvantage compared to other, less leveraged competitors; and
- increasing our cost of borrowing.

Despite our current level of indebtedness, we may be able to incur substantially more debt and enter into other transactions, which could further exacerbate the risks to our financial condition described above.

We may be able to incur significant additional indebtedness in the future. For example, on March 6, 2015, we amended and restated the credit agreement governing our revolving credit facility to provide, among other things, for an increase in the aggregate commitments thereunder from $200.0 million to $289.4 million. Additionally, during 2016 and to-date in 2017 APX issued a total of $600.0 million and $300.0 million aggregate principal amount of the 2022 notes, respectively. As of December 31, 2016 , we had $283.7 million of availability to incur secured indebtedness under the revolving credit facility (after giving effect to $5.7 million of outstanding letters of credit and no borrowings). We will be permitted to add, in addition to the revolving credit facility, incremental facilities of up to $225.0 million, subject to certain conditions being satisfied, of which up to $60.0 million may be incurred on the same “superpriority” basis as the revolving credit facility. Moreover, although our existing debt agreements contain restrictions on the incurrence of additional indebtedness and entering into certain types of other transactions, these restrictions are subject to a number of qualifications and exceptions. Additional indebtedness incurred in compliance with these restrictions could be substantial. These restrictions also do not prevent us from incurring obligations, such as trade payables, that do not constitute indebtedness as defined under our debt instruments. To the extent new debt is added to our current debt levels, the substantial leverage risks described in the previous risk factor would increase.

In addition, the exceptions to the restrictive covenants permit us to enter into certain other transactions. For example our existing debt agreements permitted us, subject to certain conditions, to distribute or otherwise use for restricted payments any proceeds we realized from the 2GIG Sale. On May 14, 2013, we distributed $60.0 million of such proceeds to our stockholders in reliance on these provisions. The remaining proceeds have been used to fund our business activities or otherwise used for general corporate purposes, and we do not intend to make future dividends to our stockholders in reliance on these provisions.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our indebtedness service obligations to increase significantly.

Borrowings under our revolving credit facility are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on the variable rate indebtedness would increase even though the amount borrowed remained the same, and our net income and cash flows, including cash available for servicing our indebtedness, would correspondingly decrease.

We may be unable to service our indebtedness.

Our ability to make scheduled payments on and to refinance our indebtedness, depends on and is subject to our financial and operating performance, which in turn is affected by general and regional economic, financial, competitive, business and other factors beyond our control, including the availability of financing in the international banking and capital markets. We cannot assure you that our business will generate sufficient cash flow from operations or that future borrowings will be available to us in an amount sufficient to enable us to service our debt, to refinance our debt or to fund our other liquidity needs.

If we are unable to meet our debt service obligations or to fund our other liquidity needs, we will need to restructure or refinance all or a portion of our debt, which could cause us to default on our debt obligations and impair our liquidity. Any refinancing of our indebtedness could be at higher interest rates and may require us to comply with more onerous covenants that could further restrict our business operations.

Moreover, in the event of a default, the holders of our indebtedness, including the notes and borrowings under our revolving credit facility, could elect to declare all the funds borrowed to be due and payable, together with accrued and unpaid interest. The lenders under our revolving credit facility could also elect to terminate their commitments thereunder, cease making further loans, and institute foreclosure proceedings against their collateral, and we could be forced into bankruptcy or liquidation. If we breach our covenants under our revolving credit facility, we would be in default under our revolving credit facility. The lenders could exercise their rights, as described above, and we could be forced into bankruptcy or liquidation.

Our existing debt agreements impose significant operating and financial restrictions on us and our subsidiaries, which may prevent us from capitalizing on business opportunities.

Our existing debt agreements impose significant operating and financial restrictions on us. These restrictions limit our ability to, among other things:

- incur or guarantee additional debt or issue disqualified stock or preferred stock;
- pay dividends and make other distributions on, or redeem or repurchase, capital stock;
- make certain investments;
- incur certain liens;
- enter into transactions with affiliates; merge or consolidate;
- enter into agreements that restrict the ability of restricted subsidiaries to make dividends or other payments us;
- designate restricted subsidiaries as unrestricted subsidiaries; and
- transfer or sell assets.

As a result of these restrictions, we are limited as to how we conduct our business and we may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. The terms of any future indebtedness we may incur could include more restrictive covenants. We cannot assure you that we will be able to maintain compliance with these covenants in the future and, if we fail to do so, that we will be able to obtain waivers from the lenders and/or amend the covenants.

Our failure to comply with the restrictive covenants described above as well as other terms of our existing indebtedness and/or the terms of any future indebtedness from time to time could result in an event of default, which, if not cured or waived, could result in our being required to repay these borrowings before their due date. If we are forced to refinance these borrowings on less favorable terms or cannot refinance these borrowings, our results of operations and financial condition could be adversely affected.

Our failure to comply with the agreements relating to our outstanding indebtedness, including as a result of events beyond our control, could result in an event of default that could materially and adversely affect our results of operations and our financial condition.

If there were an event of default under any of the agreements relating to our outstanding indebtedness, the holders of the defaulted debt could cause all amounts outstanding with respect to that debt to be due and payable immediately. We cannot assure you that our assets or cash flows would be sufficient to fully repay borrowings under our outstanding debt instruments if accelerated upon an event of default. Further, if we are unable to repay, refinance or restructure our indebtedness under our secured debt, the holders of such debt could proceed against the collateral securing that indebtedness. In addition, any event of default or declaration of acceleration under one debt instrument could also result in an event of default under one or more of our other debt instruments.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our headquarters, and one of our two monitoring facilities, are located in Provo, Utah. These premises are leased under leases expiring between December 2024 and June 2028. Additionally, we lease the premises for a separate monitoring station located in Eagan, Minnesota. We lease various other facilities throughout the U.S. and Canada for offices, warehousing, recruiting, and training purposes and own a small recruiting and training facility in Idaho. We also have a new sales recruiting, training, and call center facility under construction in Logan, UT which is scheduled to be completed in the first quarter of 2017. We believe that these facilities are adequate for our current needs and that suitable additional or substitute space will be available as needed to accommodate any expansion of our operations.

ITEM 3. LEGAL PROCEEDINGS

We are engaged in the defense of certain claims and lawsuits arising out of the ordinary course and conduct of our business and have certain unresolved claims pending, the outcomes of which are not determinable at this time. Our subscriber contracts include exculpatory provisions as described under "Business—Subscriber Contracts—Other Terms" and other liability limitations. We also have insurance policies covering certain potential losses where such coverage is available and cost effective. In our opinion, any liability that might be incurred by us upon the resolution of any claims or lawsuits will not, in the aggregate, have a material adverse effect on our financial condition or results of operations. See Note 13 of our accompanying Consolidated Financial Statements included elsewhere in this annual report on Form 10-K for additional information.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

We are a wholly owned subsidiary of APX Parent Holdco, Inc., which in turn is wholly owned through intermediate holding companies by the Investors. Presently, there is no public trading market for our common stock.

ITEM 6. SELECTED FINANCIAL DATA

The following selected historical consolidated financial information and other data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our historical consolidated financial statements and the related notes thereto contained elsewhere in this annual report on Form 10-K.

As a result of the Merger, the selected historical consolidated financial information and other data set forth below are presented on two bases of accounting and are not necessarily comparable: January 1, 2012 through November 16, 2012 (the "Predecessor Period" or "Predecessor" as context requires) and November 17, 2012 through December 31, 2015 (the "Successor Period" or "Successor" as context requires), which relate to the period preceding the Merger and the period succeeding the Merger, respectively. The selected historical consolidated financial information and other data set forth below for the Predecessor Period are presented for APX Group, Inc. and its wholly-owned subsidiaries, including variable interest entities. The selected historical consolidated financial information and other data set forth below for the Successor Period reflect the Merger presenting the financial position and results of operations of APX Group Holdings, Inc. and its wholly-owned subsidiaries. The financial position and results of operations of the Successor are not comparable to the financial position and results of operations of the Predecessor due to the Merger and the basis of presentation of purchase accounting as compared to historical cost in accordance with Accounting Standards Codification ("ASC") 805 Business Combinations.

The Successor and Predecessor Period include substantially the same operating entities except that Vivint Solar, Inc. and its subsidiaries ("Solar") is not included in the Successor Period since Solar is separately owned and is no longer a consolidated variable interest entity. The majority of the operations of Successor Period entities are included within the operations of Vivint, Inc.

The selected historical consolidated financial information and other data presented below for the years ended December 31, 2016 , 2015 and 2014 and the selected consolidated balance sheet data as of December 31, 2016 and 2015 have been derived from our audited consolidated financial statements included in this annual report on Form 10-K. The selected historical consolidated financial information and other data presented below for the years ended December 31, 2014, 2013 and 2012 and the selected consolidated balance sheet data as of December 31, 2014, 2013 and 2012 (Successor) have been derived from our audited consolidated financial statements which are not included in this annual report on Form 10-K. The selected historical consolidated financial information and other data of the Predecessor are presented for the Issuer and its wholly-owned subsidiaries, as well as Solar, 2GIG and their respective subsidiaries. The selected historical consolidated financial information and other data of the Successor Period from November 17, 2012 through December 31, 2012 reflect the Merger presenting the financial position and results of operations of Parent Guarantor and wholly-owned subsidiaries. The financial position and results of the Successor are not comparable to the financial position and results of the Predecessor due to the Merger and the application of purchase accounting in accordance with ASC 805 *Business Combinations* .

The historical financial information for the Predecessor Period from January 1, 2012 through November 16, 2012 included in this annual report on Form 10-K includes the results of Solar, which commenced operations in early 2011. As a result of the Transactions, while Solar was a variable interest entity through the date of Solar's initial public offering in October 2014, we have not been its primary beneficiary since after the date of the Transactions. Accordingly, Solar has not been required to be included in the consolidated financial statements of the Company in periods following the date of the Transactions. The historical financial information included in this annual report on Form 10-K include the results of 2GIG up through April 1, 2013, which was the date we completed the 2GIG Sale to Nortek. Solar and 2GIG do not, and will not, provide any credit support for any indebtedness of the Issuer, including indebtedness incurred under our revolving credit facility or the notes.

	Successor					Predecessor
	December 31, 2016	December 31, 2015	December 31, 2014	December 31, 2013	Period from November 17, through December 31, 2012	Period from January 1, through November 16, 2012
	(in thousands)					
Statement of Operations Data:						
Total revenue	$ 757,907	$ 653,721	$ 563,677	$ 500,908	$ 57,606	$ 397,570
Total costs and expenses	829,009	762,396	657,546	555,788	85,799	440,563
Loss from operations	(71,102)	(108,675)	(93,869)	(54,880)	(28,193)	(42,993)
Other expenses:						
Interest expense	(197,965)	(161,339)	(147,511)	(114,476)	(12,645)	(106,620)
Interest income	432	90	1,455	1,493	4	61
Gain on 2GIG Sale	—	—	—	46,866	—	—
Other (expenses) income	(7,255)	(8,832)	1,779	76	(171)	(122)
Loss from continuing operations before income taxes	(275,890)	(278,756)	(238,146)	(120,921)	(41,005)	(149,674)
Income tax expense (benefit)	67	351	514	3,592	(10,903)	4,923
Net loss from continuing operations	(275,957)	(279,107)	(238,660)	(124,513)	(30,102)	(154,597)
Discontinued operations:						
Loss from discontinued operations	—	—	—	—	—	(239)
Net loss	(275,957)	(279,107)	(238,660)	(124,513)	(30,102)	(154,836)
Net loss attributable to non-controlling interests	—	—	—	—	—	(1,319)
Net loss attributable to APX Group Holdings, Inc.	$ (275,957)	$ (279,107)	$ (238,660)	$ (124,513)	$ (30,102)	N/A
Net loss attributable to APX Group, Inc.	N/A	N/A	N/A	N/A	N/A	$ (153,517)
Balance Sheet Data (at period end):						
Cash	$ 43,520	$ 2,559	$ 10,807	$ 261,905	$ 8,090	N/A
Working capital (deficit)	(80,170)	(120,952)	(51,569)	187,781	(32,834)	N/A
Adjusted working capital (deficit) (excluding cash and capital lease obligation)	(113,893)	(115,895)	(56,827)	(69,925)	(36,923)	N/A
Total assets	2,547,662	2,303,644	2,255,586	2,370,544	2,104,926	N/A
Total debt	2,486,700	2,138,112	1,835,068	1,708,159	1,282,578	N/A
Total shareholders' (deficit) equity	$ (245,182)	$ (76,993)	$ 224,486	$ 490,243	$ 679,279	N/A
Ratio of earnings to fixed charges (1)	NM	NM	NM	NM	NM	N/A

NM—Not meaningful.
N/A—Not applicable.
(1) The ratio of earnings to fixed charges is calculated by dividing the sum of earnings (loss) from continuing operations before income taxes and fixed charges, by fixed charges. Fixed charges include interest expense on all indebtedness, amortization of debt issuance fees and interest expense on operating leases. Earnings were deficient in all periods presented to cover fixed charges by the following amounts:

Successor					Predecessor
December 31, 2016	December 31, 2015	December 31, 2014	December 31, 2013	Period from November 17, through December 31, 2012	Period from January 1, through November 16, 2012
$ (275,957)	$ (278,756)	$ (238,146)	$ (120,921)	$ (40,789)	$ (149,668)

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis provides information which management believes is relevant to an assessment and understanding of our consolidated results of operations and financial condition. The discussion should be read in conjunction with the “Selected Financial Data” and the consolidated financial statements and notes thereto contained in this annual report on Form 10-K. This discussion contains forward-looking statements and involves numerous risks and uncertainties, including, but not limited to, those described in the “Risk Factors” section of this annual report on Form 10-K. Actual results may differ materially from those contained in any forward-looking statements.

Business Overview

We are one of the largest companies in North America focused on delivering smart home products and services. Our integrated smart home platform offers subscribers a comprehensive suite of products and services to remotely control, monitor and manage their homes using any smart device. Unlike many other smart home companies, who generally focus only on selling equipment and software, subscriber origination or servicing, we are a vertically integrated smart home company, owning the entire customer lifecycle including sales, professional installation, service, monitoring, billing and customer support. We believe that with our proven business model, along with 17 years of experience installing integrated solutions, we are well positioned to continue to lead the large and growing smart home market. We offer homeowners a customized smart home that integrates a wide variety of smart home and security devices. We seek to deliver a quality subscriber experience through a combination of innovative products and services and a commitment to customer service, which together with our focus on originating high-quality new subscribers, has enabled us to achieve attrition rates that we believe are historically at or below industry averages. Through our established underwriting criteria and compensation structure, we have built a portfolio of approximately 1,147,000 subscribers in North America, with an average credit score of 714 , as of December 31, 2016 . Over 95% of our revenues during the years ended December 31, 2016 and 2015 , respectively, consisted of contractually committed revenues, which have historically resulted in consistent and predictable operating results.

Key 2016 Events

In April 2016, Parent completed the first installment of an issuance and sale to certain investors of a series of preferred stock and contributed the net proceeds from such issuance of $69.8 million to us as an equity contribution. In July 2016, Parent completed the final installment of the issuance and sale to certain investors of such series of preferred stock and, in August 2016, contributed the net proceeds from such issuance of $30.6 million to us as an equity contribution. Both issuances were private placements exempt from registration under the Securities Act.

In May 2016, APX issued $500.0 million aggregate principal amount of 2022 notes, pursuant to an indenture dated as of May 26, 2016 among APX, the guarantors party thereto and Wilmington Trust, National Association, as trustee and collateral agent. The 2022 notes will mature on December 1, 2022, or on such earlier date when any outstanding pari passu lien indebtedness matures as a result of the operation of any “Springing Maturity” provision set forth in the agreements governing such pari passu lien indebtedness. The 2022 notes are secured, on a pari passu basis, by the collateral securing obligations under the 2019 notes and 2022 private placement notes and the revolving credit facilities, in all cases, subject to certain exceptions and permitted liens. APX used a portion of the net proceeds from the issuance of the 2022 notes to repurchase approximately $235 million aggregate principal amount of the outstanding 2019 notes and 2022 private placement notes in privately negotiated transactions and repaid borrowings under the existing revolving credit facility. In August 2016, APX issued an additional $100.0 million aggregate principal amount of the 2022 notes at a price of 104.00%.

On May 2, 2016, we and David Bywater, our former Chief Operating Officer, agreed that in connection with the appointment of Mr. Bywater as interim Chief Executive Officer of Vivint Solar, Inc., Mr. Bywater would take a leave of absence from our company. On December 15, 2016, our Board of Directors (the “Board”) appointed Scott Hardy to serve as our Chief Operating Officer effective December 15, 2016. Mr. Hardy will succeed David Bywater, who notified us on December 15, 2016 of his intent to resign as our Chief Operating Officer.

In November 2016, we amended the Marketing and Customer Relations Agreement with Solar to update certain terms and conditions governing existing cross-marketing initiatives and to implement new cross-marketing initiatives including a three-month pilot program with the purpose of exploring potential opportunities for each company to offer, sell and integrate the other company’s respective products and services with its standard product offering.

Recent Developments

On January 3, 2017, we announced the introduction of the Vivint Flex Pay plan. Under the Vivint Flex Pay plan, we (i) will launch a Consumer Financing Program in the first quarter of 2017, pursuant to which we will offer to qualified customers in the United States an opportunity to finance the purchase of Products used in connection with our smart home and security services through a third party financing provider and (ii) have begun to offer RICs with respect to the purchase of Products to certain customers who do not qualify to participate in the Consumer Financing Program, but qualify under our historical underwriting criteria. We may also establish credit programs either directly or through an affiliate or pursuant to an agreement with a third party to provide installment loans or similar products to customers that do not qualify to participate in the Consumer Financing Program. Alternatively, customers may purchase the Products with cash or credit card.

Under the Vivint Flex Pay plan, customers pay separately for the Products and our smart home and security services. Under the Consumer Financing Program, qualified customers will be eligible for installment loans provided by a third party financing provider of up to $4,000 for either 42 or 60 months. In connection with the Consumer Financing Program, a subsidiary of ours entered into the CFP Agreement with Citizens pursuant to which Citizens will be the exclusive provider of installment loans under the Consumer Financing Program for our customers who are eligible for such loans. Pursuant to the CFP Agreement, we will pay a monthly fee to Citizens based on the average daily balance of the loans provided by Citizens outstanding and we will share with Citizens liability for credit losses, with Vivint being responsible for approximately 5% to 100% of lost principal balances, depending on factors specified in the CFP Agreement. The initial term of the CFP Agreement is five years, subject to automatic, one-year renewals unless terminated by either party in accordance with its terms. We are initially offering RICs for 42 or 60 month terms to certain customers who do not qualify to participate in the Consumer Financing Program, but qualify under our historical underwriting criteria, and may establish credit programs either directly or through an affiliate or pursuant to an agreement with a third party to provide installment loans or similar products to such customers. Along with the purchase of the Products, customers enter into a service agreement with simple pricing of $39.99 per month for basic security or $49.99 per month for smart home with the same term lengths as their installment loan agreements or RICs.

On February 1, 2017, APX issued an additional $300.0 million aggregate principal amount of the 2022 notes at a price of 108.250%. We used the net proceeds from the offering of these 2022 notes to redeem $300.0 million aggregate principal amount of the existing 2019 notes and pay the related redemption premium, and to pay all fees and expenses related thereto and will use any remaining proceeds for general corporate purposes.

Key Factors Affecting Operating Results

Our business is driven through the generation of new subscribers and servicing and maintaining our existing subscriber base. The generation of new subscribers requires significant upfront investment, which in turn provides predictable, contractual, recurring monthly revenue generated from our monitoring and additional services. Going forward, we expect the Vivint Flex Pay program to offset a portion of the upfront investment associated with the generation of new subscribers. We generally market our service offerings through two sales channels, direct-to-home and inside sales. Historically, a majority of our new subscriber accounts were generated through direct-to-home sales, primarily from April through August. New subscribers generated through inside sales was approximately 36% of total new subscriber additions in the year ended December 31, 2016 , as compared to 28% of total new subscribers in the year ended December 31, 2015 . Over time we expect the number of subscribers originated through inside sales to continue to increase, resulting from increased advertising, new lead generation sources, lead conversion and greater brand awareness.

Our operating results are impacted by the following key factors: number of subscriber additions, net subscriber acquisition costs, ARPU, subscriber adoption rate of additional services beyond our base security offering, subscriber attrition, the costs to monitor and service our subscribers, the level of general and administrative expenses and the availability and cost of capital required to generate new subscribers. We focus our investment decisions on generating new subscribers and servicing our existing subscribers in the most cost-effective manner, while maintaining a high level of customer service to minimize subscriber attrition. These decisions are based on the projected cash flows and associated margins generated over the expected life of the subscriber relationship.

Our ability to increase subscribers depends on a number of factors, both external and internal. External factors include the overall macroeconomic environment, the availability of additional capital, awareness of our brand and competition from other companies in the geographies we serve, particularly in those markets where our direct-to-home sales representatives are present. Some of our current competitors have longer operating histories, greater name recognition and substantially greater financial and marketing resources than us. In the future, other companies may also choose to begin offering services similar to ours. In addition, because such a large percentage of our new subscribers are generated through direct-to-home sales, any actions limiting this sales channel could negatively affect our ability to grow our subscriber base. We are continually evaluating ways to improve the effectiveness of our subscriber acquisition activities in both our direct-to-home and inside sales channels, and over time we intend to add other sales models and channels to grow our subscriber base.

Internal factors include our ability to recruit, train and retain personnel, along with the level of investment in sales and marketing efforts. As a result, we expect to increase our investment in advertising over time. We believe maintaining competitive compensation structures, differentiated product offerings and establishing a strong brand are critical to attracting and retaining high-quality personnel and competing effectively in the markets we serve. Successfully growing our RPU depends on our ability to continue expanding our technology platform by offering additional value added services demanded by the market. Therefore, we continually evaluate the viability of additional product and service offerings that could further leverage our existing technology platform and sales channels. As evidence of this focus on new services, since 2010, we have successfully expanded our service offerings from residential security into smart home services, which allows us to charge higher RPU for these additional service offerings. These offerings include our proprietary Vivint Smart Home Cloud, Vivint Smart Drive, Vivint Doorbell Camera, Vivint Ping Camera and Vivint Element Thermostat. During the year ended December 31, 2016 , approximately 86% of our new subscribers contracted for one of our smart home offerings. Due to the high rate of adoption of additional smart home product and service offerings, our ARPNU has increased from $44.50 in 2009 to $66.81 for the year ended December 31, 2016 , an increase of 50% .

We focus on managing the costs associated with monitoring and service without jeopardizing our award-winning service quality. We believe our ability to retain subscribers over the long-term starts with our underwriting criteria and is enhanced by maintaining our consistent quality service levels.

Subscriber attrition has a direct impact on the number of subscribers who we monitor and service and on our financial results, including revenues, operating income and cash flows. A portion of the subscriber base can be expected to cancel its service every year. Subscribers may choose not to renew or may terminate their contracts for a variety of reasons, including, but not limited to, relocation, cost, switching to a competitor's service or service issues. If a subscriber relocates, but continues their service, we do not consider this as a cancellation. If a subscriber discontinues their service and transfers the original subscriber's contract to a new subscriber continuing the revenue stream, we also do not consider this as a cancellation. We analyze our attrition by tracking the number of subscribers who cancel as a percentage of the average number of subscribers at the end of each twelve month period. We caution investors that not all companies, investors and analysts in our industry define attrition in the same manner.

The table below presents our subscriber data for the years ended December 31, 2016 , 2015 and 2014 :

	Year ended December 31,		
	2016	2015	2014
Beginning balance of subscribers	1,013,917	894,175	795,500
Net new additions	277,241	236,562	204,464
Subscriber contracts sold (1)	(7,520)	—	—
Attrition	(136,892)	(116,820)	(105,789)
Ending balance of subscribers	1,146,746	1,013,917	894,175
Monthly average subscribers	1,082,694	953,923	849,454
Attrition rate	12.6%	12.2%	12.5%

(1) Represents our New Zealand and Puerto Rico subscriber contracts sold during the year ended December 31, 2016.

Historically, we have experienced an increased level of subscriber cancellations in the months surrounding the expiration of such subscribers' initial contract term. Attrition in any period may be impacted by the number of subscriber contracts reaching the end of their initial term in such period. The increase in attrition in the year ended December 30, 2016, reflects the effect of the 2012 and 2013 42-month pools reaching the end of their initial contract terms. We believe this trend in cancellations at the end of the initial contract term is comparable to other companies within our industry.

Basis of Presentation

We conduct business through one operating segment, Vivint. Historically, we primarily operated in three geographic regions: United States, Canada and New Zealand. During the year ended December 31, 2016 , we sold all our New Zealand and Puerto Rico subscriber contracts and ceased operations in these geographical regions ("2016 Contract Sales"). Historically, our operations in both regions were considered immaterial and reported in conjunction with the United States. See Note 15 in the accompanying consolidated financial statements for more information about our geographic segments.

How We Generate Revenue

Our primary source of revenue is generated through recurring monthly services and wireless internet services provided to our subscribers in accordance with their subscriber contracts. The remainder of our revenue is generated through additional services, activation fees, upgrades and maintenance and repair fees. Recurring revenues accounted for over 95% of total revenues for the years ended December 31, 2016 , 2015 and 2014 , respectively.

Recurring revenue. Recurring services for our subscriber contracts are billed in advance, generally monthly, pursuant to the terms of subscriber contracts and recognized ratably over the service period. The amount of RPU billed is dependent upon which of our service offerings is included in the subscriber contracts. Our smart home offerings generally provide higher RPU than our base security offering. Historically, we have generally offered contracts to subscribers that range in length from 36 to 60 months that are subject to automatic annual or monthly renewal after the expiration of the initial term. At the end of each monthly period, the portion of recurring fees related to services not yet provided are deferred and recognized as these services are provided.

Service and other sales revenue . Our service and other sales revenue is primarily comprised of amounts charged for selling additional equipment, and maintenance and repair. These amounts are billed, and the associated revenue recognized, at the time of installation or when the services are performed. Service and other sales revenue also includes contract fulfillment revenue, which relates to amounts paid by subscribers who cancel their monitoring contract in-term and for which we have no future service obligation to them. We recognize this revenue upon receipt of payment from the subscriber.

Activation fees. Activation fees represent upfront one-time charges billed to subscribers at the time of installation and are deferred. Effective April 1, 2016 these fees are recognized over 15 years using a 240% declining balance method, which converts to a straight-line methodology after approximately nine years when the resulting amortization exceeds that from the accelerated method. We evaluate subscriber account attrition on a periodic basis, utilizing observed attrition rates for our subscriber contracts and industry information and, when necessary, makes adjustments to the estimated subscriber relationship period and amortization method.

Costs and Expenses

Operating expenses. Operating expenses primarily consists of labor associated with monitoring and servicing subscribers and labor and equipment expenses related to upgrades and service repairs. We also incur equipment costs associated with excess and obsolete inventory and rework costs related to equipment removed from subscriber’s homes. In addition, a portion of general and administrative expenses, comprised of certain human resources, facilities and information technologies costs are allocated to operating expenses. This allocation is primarily based on employee headcount and facility square footage occupied. Because our SHPs perform most subscriber installations generated through our inside sales channels, the costs incurred by the field service associated with these installations are allocated to capitalized subscriber acquisition costs.

Selling expenses. Selling expenses are primarily comprised of costs associated with housing for our direct-to-home sales representatives, advertising and lead generation, marketing and recruiting, certain portions of sales commissions, overhead (including allocation of certain general and administrative expenses) and other costs not directly tied to a specific subscriber origination. These costs are expensed as incurred.

General and administrative expenses. General and administrative expenses consist largely of finance, legal, research and development (“R&D”), human resources, information technology and executive management expenses, including stock-based compensation expense. Stock-based compensation expense is recorded within various components of our costs and expenses. General and administrative expenses also include the provision for doubtful accounts. We allocate approximately one-third of our gross general and administrative expenses, excluding the provision for doubtful accounts, into operating and selling expenses in order to reflect the overall costs of those components of the business. In addition, in connection with certain service agreements with Solar, we subleased corporate office space to them through October 2014 and provide certain other administrative services to Solar. We charge Solar the costs associated with these service agreements (See Note 14 in our accompanying consolidated financial statements).

Depreciation and amortization. Depreciation and amortization consists of depreciation from property and equipment, amortization of equipment leased under capital leases, capitalized subscriber acquisition costs and intangible assets.

Key Operating Metrics

In evaluating our results, we review the key performance measures discussed below. We believe that the presentation of key performance measures is useful to investors and lenders because they are used to measure the value of companies such as ours with recurring revenue streams.

Total Subscribers

Total subscribers is the aggregate number of active smart home and security subscribers at the end of a given period.

Monthly Revenue per User

Monthly Revenue per User ("RPU") is the recurring monthly revenue billed to a smart home and security subscriber.

Total Revenue per User

Total RPU is the aggregate RPU billed to all smart home and security subscribers.

Average RPU

Average RPU ("ARPU") is the total RPU divided by total subscribers.

Average Revenue per New User

Average Revenue per New User ("ARPNU") is the aggregate RPU for new subscribers originated during a period divided by the number of new subscribers originated during such period.

Attrition

Attrition is the aggregate number of canceled smart home and security subscribers during a period divided by the monthly weighted average number of total smart home and security subscribers for such period. Subscribers are considered canceled when they terminate in accordance with the terms of their contract, are terminated by us or if payment from such subscribers is deemed uncollectible (when at least four monthly billings become past due). Sales of contracts to third parties, certain moves and takeovers are excluded from the attrition calculation.

Net Subscriber Acquisition Costs

Net subscriber acquisition costs is the direct and indirect costs to create a new smart home and security subscriber. These include commissions, equipment, installation, marketing and other allocations (general and administrative and overhead); less activation fees, installation fees and upsell revenue. These costs exclude residuals and long-term equity expenses associated with the direct-to-home sales channel.

Net Subscriber Acquisition Multiple

Net subscriber acquisition multiple is the total net subscriber acquisition costs, divided by the number of new subscribers originated, and then divided by the ARPNU.

Net Service Cost per Subscriber

Net service cost per subscriber is the total service costs for the period, including monitoring, customer service, field service and other allocations (general and administrative and overhead) costs, less total service revenue for the period divided by total subscribers.

Net Service Margin

Net service margin is the ARPU for the period less net service costs divided by the ARPU for the period.

Critical Accounting Policies and Estimates

In preparing our consolidated financial statements, we make assumptions, judgments and estimates that can have a significant impact on our revenue, loss from operations and net loss, as well as on the value of certain assets and liabilities on our Consolidated Balance Sheets. We base our assumptions, judgments and estimates on historical experience and various other factors that we believe to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions. At least quarterly, we evaluate our assumptions, judgments and estimates and make changes accordingly. Historically, our assumptions, judgments and estimates relative to our critical accounting estimates have not differed materially from actual results. We believe that the assumptions, judgments and estimates involved in the accounting for income taxes, allowance for doubtful accounts, valuation of intangible assets, and fair value have the greatest potential impact on our consolidated financial statements; therefore, we consider these to be our critical accounting estimates. For information on our significant accounting policies, see Note 2 to our accompanying consolidated financial statements.

Change in Accounting Estimate

Effective April 1, 2016, we updated the estimated life of our subscriber relationships and the period used to amortize deferred activation fees and deferred subscriber acquisition costs, to better approximate the related anticipated life of the customer. Prior to the change, we amortized deferred activation fees and subscriber acquisition costs over 12 years using a 150% declining balance method, which converted to a straight-line methodology after approximately five years . Subsequent to the change , we amortize deferred activation fees and subscriber acquisition costs over 15 years using a 240% declining balance method, which converts to a straight-line methodology after approximately nine years when the resulting amortization exceeds that from the accelerated method. The effects of this change in estimate were as follows (in thousands):

	Year ended December 31, 2016
Increase in activation fee revenues	$ 1,400
Increase in depreciation and amortization	21,413
Increase to loss from operations	20,013
Increase to net loss	19,621

All pertinent factors, including actual customer attrition data, demand, competition, and the estimated technological life of the installed equipment, will continue to be reviewed by us to assess the continued appropriateness of methods and estimated subscriber relationship period.

Revenue Recognition

We recognize revenue principally on three types of transactions: (i) recurring revenue, which includes revenues for monitoring and other smart home services of our subscriber contracts and recurring monthly revenue associated with Vivint Wireless Inc., (ii) service and other sales, which includes non-recurring service fees charged to subscribers provided on contracts, contract fulfillment revenues and sales of products that are not part of our service offerings, and (iii) activation fees on subscriber contracts, which are amortized over the expected life of the customer.

Recurring revenue for our subscriber contracts is billed in advance, generally monthly, pursuant to the terms of subscriber contracts and recognized ratably over the service period. Costs of providing ongoing recurring services are expensed in the period incurred.

Service and other sales revenue is recognized as services are provided or when title to the products and equipment sold transfers to the customer. Contract fulfillment revenue, included in service and other sales, is recognized when payment is received from customers who cancel their contract in-term. Revenue from sales of products that are not part of the basic equipment offering is generally recognized upon delivery of products.

Activation fees represent upfront one-time charges billed to subscribers at the time of installation and are deferred and recognized over the expected customer life. We evaluate subscriber account attrition on a periodic basis, utilizing observed attrition rates for our subscriber contracts and industry information and, when necessary, makes adjustments to the estimated subscriber relationship period and amortization method.

Subscriber Acquisition Costs

Subscriber acquisition costs represent the costs related to the origination of new subscribers. A portion of subscriber acquisition costs is expensed as incurred, which includes costs associated with the direct-to-home sale housing, marketing and recruiting, certain portions of sales commissions (residuals), overhead and other costs, considered not directly and specifically tied to the origination of a particular subscriber. The remaining portion of the costs is considered to be directly tied to subscriber acquisition and consists primarily of certain portions of sales commissions, equipment, and installation costs. These costs are deferred and amortized over 15 years using a 240% declining balance method, which converts to a straight-line methodology after approximately nine years when the resulting amortization exceeds that from the accelerated method. The Company evaluates subscriber account attrition on a periodic basis, utilizing observed attrition rates for the Company's subscriber contracts and industry information and, when necessary, makes adjustments to the estimated subscriber relationship period and amortization method.

On the accompanying consolidated statement of cash flows, subscriber acquisition costs that are comprised of equipment and related installation costs purchased for, or used in, subscriber contracts in which we retain ownership to the equipment are classified as investing activities and reported as "Subscriber acquisition costs – company owned equipment." All other subscriber acquisition costs are classified as operating activities and reported as "Subscriber acquisition costs – deferred contract costs" on the condensed consolidated statements of cash flows as these assets represent deferred costs associated with customer contracts.

In conjunction with the Merger and in accordance with purchase accounting, the total purchase price was allocated to our net tangible and identifiable intangible assets based on their estimated fair values as of November 16, 2012 (See Note 8 in our accompanying consolidated financial statements). We recorded the value of Subscriber Acquisition Costs on the date of the Merger at fair value and classified it as an intangible asset, which is amortized over 10 years in a pattern that is consistent with the amount of revenue expected to be generated from the related subscriber contracts.

Accounts Receivable

Accounts receivable consist primarily of amounts due from subscribers for recurring services. Accounts receivable are recorded at invoiced amounts and are non-interest bearing. The gross amount of accounts receivable has been reduced by an allowance for doubtful accounts of approximately $4.1 million and $3.5 million at December 31, 2016 and December 31, 2015 , respectively. We estimate this allowance based on historical collection and attrition rates. As of December 31, 2016 and 2015 , no accounts receivable were classified as held for sale. Provision for doubtful accounts recognized and included in general and administrative expenses in the accompanying audited consolidated statements of operations totaled $19.6 million , $14.9 million and $15.7 million for the year ended December 31, 2016 , 2015 and 2014 , respectively.

Loss Contingencies

We record accruals for various contingencies including legal proceedings and other claims that arise in the normal course of business. The accruals are based on judgment, the probability of losses and, where applicable, the consideration of opinions of legal counsel. We record an accrual when a loss is deemed probable to occur and is reasonably estimable. Factors that we consider in the determination of the likelihood of a loss and the estimate of the range of that loss in respect of legal matters include the merits of a particular matter, the nature of the litigation, the length of time the matter has been pending, the procedural posture of the matter, whether we intend to defend the matter, the likelihood of settling for an insignificant amount and the likelihood of the plaintiff accepting an amount in this range. However, the outcome of such legal matters is inherently unpredictable and subject to significant uncertainties.

Goodwill and Intangible Assets

Purchase accounting requires that all assets and liabilities acquired in a transaction be recorded at fair value on the acquisition date, including identifiable intangible assets separate from goodwill. For significant acquisitions, we obtain independent appraisals and valuations of the intangible (and certain tangible) assets acquired and certain assumed obligations as well as equity. Identifiable intangible assets include customer relationships, spectrum licenses and other purchased and internally developed technology, which totaled $475.4 million at December 31, 2016 . Goodwill represents the excess of cost over the fair value of net assets acquired and was $835.2 million at December 31, 2016 .

The estimated fair values and useful lives of identified intangible assets are based on many factors, including estimates and assumptions of future operating performance and cash flows of the acquired business, estimates of cost avoidance, the nature of the business acquired, the specific characteristics of the identified intangible assets and our historical experience and that of the acquired business. The estimates and assumptions used to determine the fair values and useful lives of identified intangible assets could change due to numerous factors, including product demand, market conditions, regulations affecting the business model of our operations, technological developments, economic conditions and competition. The carrying values and useful lives for amortization of identified intangible assets are reviewed annually during our fourth fiscal quarter and as necessary if changes in facts and circumstances indicate that the carrying value may not be recoverable and any resulting changes in estimates could have a material adverse effect on our financial results.

When we determine that the carrying value of intangible assets, goodwill and long-lived assets may not be recoverable, an impairment charge is recorded. Impairment is generally measured based on valuation techniques considered most appropriate under the circumstances, including a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk inherent in our current business model or prevailing market rates of investment securities, if available.

We conduct a goodwill impairment analysis annually in our fourth fiscal quarter, as of October 1, and as necessary if changes in facts and circumstances indicate that the fair value of our reporting units may be less than their carrying amount. Under applicable accounting guidance, we are permitted to use a qualitative approach to evaluate goodwill impairment when no indicators of impairment exist and if certain accounting criteria are met. To the extent that indicators exist or the criteria are not met, we use a quantitative approach to evaluate goodwill impairment based on estimated growth in our business and discount rates. Such quantitative impairment assessment is performed using a two-step, fair value based test. The first step requires that we compare the estimated fair value of our reporting units to the carrying value of the reporting unit's net assets, including goodwill. If the fair value of the reporting unit is greater than the carrying value of its net assets, goodwill is not considered to be impaired and no further testing is required. If the fair value of the reporting unit is less than the carrying value of its net assets, we would be required to complete the second step of the test by analyzing the fair value of its goodwill. If the carrying value of the goodwill exceeds its fair value, an impairment charge is recorded.

Property and Equipment

Property and equipment are stated at cost and depreciated on the straight-line method over the estimated useful lives of the assets or the lease term, whichever is shorter. Amortization expense associated with leased assets is included with depreciation expense. Routine repairs and maintenance are charged to expense as incurred. We periodically assess potential impairment of our property and equipment and perform an impairment review whenever events or changes in circumstances indicate that the carrying value may not be recoverable.

Income Taxes

We account for income taxes based on the asset and liability method. Under the asset and liability method, deferred tax assets and deferred tax liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating loss and tax credit carryforwards. Valuation allowances are established when necessary to reduce deferred tax assets when it is determined that it is more likely than not that some portion of the deferred tax asset will not be realized.

We recognize the effect of an uncertain income tax position on the income tax return at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Our policy for recording interest and penalties is to record such items as a component of the provision for income taxes.

Recent Accounting Pronouncements

In May 2014, the FASB originally issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)* which clarifies the principles used to recognize revenue for all entities. This guidance requires companies to recognize revenue when they transfer goods or services to a customer in an amount that reflects the consideration to which they expect to be entitled. In August 2015, the FASB issued ASU 2015-14 which deferred the effective date of ASU 2014-09 by one year to be effective for annual reporting periods beginning after December 15, 2017. In March 2016, the FASB issued ASU 2016-08 to clarify the implementation guidance on principal versus agent considerations as it relates to Topic 606. In June 2016, the FASB issued ASU 2016-10 to clarify the implementation guidance on identifying performance obligations and licensing as it relates to Topic 606. This update reduces the complexity when applying the guidance for identifying performance obligations and improves the operability and understandability of the license implementation guidance. In June 2016, the FASB issued ASU 2016-12 to clarify the implementation guidance on Topic 606, which amends the guidance on transition, collectability, non-cash consideration and the presentation of sales and other similar taxes.

We currently plan to adopt Topic 606 using the modified retrospective approach with the cumulative effect of initially applying the new standard recognized at the date of initial application and providing certain additional disclosures. However, a final decision regarding the adoption method has not been made at this time. Our final determination will depend on a number of factors, such as the significance of the impact of the new standard on our financial results, system readiness, including our ability to accumulate and analyze the information necessary to assess the impact on prior period financial statements, as necessary.

We are in the initial stages of our evaluation of the impact of the new standard on our accounting policies, processes, and system requirements. We have assigned internal resources in addition to the engagement of third party service providers to assist in the evaluation. Furthermore, we have made and will continue to make investments in systems to enable timely and accurate reporting under the new standard. We expect the standard to have an effect on the subscriber acquisitions costs, net and deferred revenues included in our condensed consolidated balance sheets and the recognition of revenues and amortization of subscriber acquisition costs on the consolidated statement of operations. We do not expect the standard to have a significant impact to the consolidated statements of changes in equity or the consolidated statements of cash flows.

While we continue to assess the potential impacts of the new standard, including the areas described above, and anticipate this standard could have a material impact on the consolidated financial statements, we do not know or cannot reasonably estimate quantitative information related to the impact of the new standard on our financial statements at this time.

In March 2016, the FASB issued ASU 2016-09 to simplify accounting for employee share-based payments. This update involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017 and will be applied prospectively and/or retrospectively, with early adoption permitted. We plan to adopt this update on the effective date and the adoption is not expected to materially impact the consolidated financial statements.

In March 2016, the FASB issued ASU 2016-07 which eliminates the requirement to retroactively adopt the equity method of accounting when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016 and must be applied prospectively, with early adoption permitted. We plan to adopt this update on the effective date and the adoption is not expected to materially impact the consolidated financial statements.

In March 2016, the FASB issued ASU 2016-06 to clarify the assessment of contingent put and call options in debt instruments as it relates to Derivatives and Hedging (Topic 815). The amendments in this update clarify the requirements for assessing whether contingent call (put) options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts. An entity performing the assessment under the amendments in this update is required to assess the embedded call (put) options solely in accordance with the four-step decision sequence. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016 and must be applied using a modified retrospective approach, with early adoption permitted. We plan to adopt this update on the effective date and the adoption is not expected to materially impact the consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02 to increase transparency and comparability among organizations as it relates to lease assets and lease liabilities. The update requires that lease assets and lease liabilities be recognized on the balance sheet, and that key information about leasing arrangements be disclosed. Prior to this update, GAAP did not require operating leases to be recognized as lease assets and lease liabilities on the balance sheet. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018 and must be applied using a modified retrospective approach, with early adoption permitted. We are evaluating the new guidance and plan to provide additional information about its expected impact at a future date.

In January 2016, the FASB issued ASU 2016-01 to address certain aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The main provisions of this update require equity investments to be measured at fair value with changes in fair value recognized in earnings, allows a company to value equity investments without a readily determined fair value at cost, less any impairments, and simplifies the assessment of impairments of equity investments without a readily determinable fair value by requiring a qualitative assessment. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. An entity should apply the amendments by means of a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. The amendments related to equity securities without readily determinable fair values (including disclosure requirements) should be applied prospectively to equity investments that exist as of the date of adoption of the Update. Early adoption is permitted. We are evaluating the new guidance and plan to provide additional information about its expected impact upon adoption at a future date.

Results of operations

	Year ended December 31,		
	2016	2015	2014
		(in thousands)	
Total revenues	$ 757,907	$ 653,721	$ 563,677
Total costs and expenses	829,009	762,396	657,546
Loss from operations	(71,102)	(108,675)	(93,869)
Other expenses	204,788	170,081	144,277
Loss before taxes	(275,890)	(278,756)	(238,146)
Income tax expense	67	351	514
Net loss	$ (275,957)	$ (279,107)	$ (238,660)
Key operating metrics			
Total Subscribers, as of December 31 (thousands)	1,146.7	1,013.9	894.2
Total RPU (thousands) (1)	$ 65,633	$ 55,689	$ 48,732
ARPU (1)	$ 57.23	$ 54.92	$ 54.50
Net Service Cost per Subscriber	$ 14.72	$ 14.33	$ 15.65
Net Service Margin	74%	74%	71%
Net Subscriber Acquisition Multiple	29.9x	30.9x	31.3x

(1) Total RPU and ARPU data are provided as of each period end.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

Revenues

The following table provides the significant components of our revenue for the years ended December 31, 2016 and 2015 :

	Year ended December 31,		
	2016	2015	% Change
	(in thousands)		
Recurring revenue	$ 724,478	$ 624,989	16%
Service and other sales revenue	22,855	22,700	1%
Activation fees	10,574	6,032	75%
Total revenues	$ 757,907	$ 653,721	16%

Total revenues increased $104.2 million , or 16% , for the year ended December 31, 2016 as compared to the year ended December 31, 2015 , primarily due to the growth in recurring revenue, which increased $99.5 million , or 16% . $83.3 million of the increase in recurring revenue was due to an increase in Total Subscribers and $15.5 million of the increase was due to increases in RPU. Recurring revenues associated with our wireless internet business increased $2.7 million for the year ended December 31, 2016 as compared to the year ended December 31, 2015 . Currency translation negatively affected total revenues by $2.1 million , as computed on a constant currency basis.

Service and other sales revenue remained essentially flat for the year ended December 31, 2016 as compared to the year ended December 31, 2015 .

The revenue associated with activation fees is deferred upon billing and recognized over the estimated life of the subscriber relationship. There was deemed to be no fair value associated with deferred activation fee revenues at the time of the Acquisition. Thus, all activation fee revenue recognized in the years ended December 31, 2016 and 2015 relate to contracts generated after the Acquisition. Revenues recognized related to activation fees increased $4.5 million , or 75% , for the year ended December 31, 2016 as compared to the year ended December 31, 2015 , primarily due to the increase in the number of subscribers from whom we have collected activation fees since the date of the Acquisition and a change in the timing of recognizing deferred activation fees as a result of the estimate relating to amortization.

Costs and Expenses

The following table provides the significant components of our costs and expenses for the years ended December 31, 2016 and 2015 :

	Year ended December 31,		
	2016	2015	% Change
	(in thousands)		
Operating expenses	$ 264,865	$ 228,315	16 %
Selling expenses	131,421	122,948	7 %
General and administrative	143,168	107,212	34 %
Depreciation and amortization	288,542	244,724	18 %
Restructuring and asset impairment charges	1,013	59,197	(98)%
Total costs and expenses	$ 829,009	$ 762,396	9 %

Operating expenses increased $36.6 million , or 16% , for the year ended December 31, 2016 as compared to the year ended December 31, 2015 , primarily driven by an increase of $23.6 million in personnel and related costs, an increase of $7.9 million in facilities and IT infrastructure costs, an increase of $1.9 million in monitoring costs from third-party cellular providers, and an increase of $1.3 million in banking fees. All of these cost increases related to supporting the 13.1% growth in our subscriber base.

Selling expenses, excluding amortization of capitalized subscriber acquisition costs, increased $8.5 million , or 7% , for the year ended December 31, 2016 as compared to the year ended December 31, 2015 . This increase was principally comprised of $6.6 million in expenses associated with lead generation, primarily related to the 53.4% growth in new subscribers generated through our inside sales channel and an increase of $4.1 million in facilities and IT infrastructure costs. This increase was offset, in part, by a decrease in legal costs of $1.7 million .

General and administrative expenses increased $36.0 million , or 34% , for the year ended December 31, 2016 as compared to the year ended December 31, 2015 , primarily due to a non-cash gain of $12.2 million in connection with the settlement of the Merger-related escrow recorded during the year ended December 31, 2015, an increase of $10.8 million in personnel costs, which included a $2.2 million stock-based compensation expense related to an equity repurchase by 313 from one our executives, an increase of $4.8 million in legal costs, an increase in IT and contracted services of $3.5 million to support the growth in the business, an increase of $2.7 million in research and development costs and an increase of $1.4 million in brand marketing.

Depreciation and amortization increased $43.8 million , or 18% , for the year ended December 31, 2016 as compared to the year ended December 31, 2015 . The increase was primarily due to increased amortization of subscriber acquisition costs arising from the growth in our subscriber base and a change in the timing of recognizing capitalized subscriber acquisition costs as a result of the estimate relating to amortization.

Restructuring and asset impairment charges for the year ended December 31, 2016 primarily related to net the net loss of $2.6 million associated with the 2016 Contract Sales, offset by $1.5 million of wireless restructuring and asset impairment recoveries. Restructuring and asset impairment charges for the year ended December 31, 2015 relate to the transition in our Wireless Internet business from a 5Ghz to a 60Ghz-based network technology (See Note 11 to the accompanying consolidated financial statements).

Other Expenses, net

The following table provides the significant components of our other expenses, net, for the years ended December 31, 2016 and 2015 :

	Year ended December 31,		% Change
	2016	2015	
	(in thousands)		
Interest expense	$ 197,965	$ 161,339	23 %
Interest income	(432)	(90)	NM
Other loss, net	7,255	8,832	(18)%
Total other expenses, net	$ 204,788	$ 170,081	20 %

Interest expense increased $36.6 million , or 23% , for the year ended December 31, 2016 , as compared with the year ended December 31, 2015 , due to a higher principal balance on our debt. See Note 5 to our accompanying Consolidated Financial Statements for further information on our long-term debt.

Other loss, net, decreased by $1.6 million , or 18% for the year ended December 31, 2016 , as compared with the year ended December 31, 2015 . The decrease is due, in part, to the change in the foreign currency translation from a foreign currency exchange loss of $9.4 million during the year ended December 31, 2015 to a foreign currency exchange gain of $2.1 million during the year ended December 31, 2016 . This decrease was partially offset by losses and expenses incurred of $10.1 million resulting from our debt modification and extinguishment (See Note 5 to the accompanying consolidated financial statements). During the year ended December 31, 2015 we recorded $7.1 million currency translation losses as a result of a change in treatment of foreign currency exchange gains and losses on intercompany balances. Prior to July 2015, we classified intercompany receivable balances with our foreign subsidiaries as long-term investments with translation gains and losses recorded in other comprehensive income. Beginning in July 2015, as part of our cash management strategy we determined that settlement of these intercompany balances were anticipated and therefore these balances are not considered to be long-term investments and any subsequent translation gains or losses are recorded in income.

Income Taxes

The following table provides the significant components of our income tax expense for the years ended December 31, 2016 and 2015 :

	Year ended December 31,		% Change
	2016	2015	
	(in thousands)		
Income tax expense	$ 67	$ 351	NM

Income tax expense decreased $0.3 million for the year ended December 31, 2016 , as compared with the year ended December 31, 2015 . Our tax expense for the years ended December 31, 2016 and 2015 resulted primarily from earnings in our Canadian subsidiary, as well as U.S. minimum state taxes.

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

Revenues

The following table provides the significant components of our revenue for the years ended December 31, 2015 and 2014 :

	Year ended December 31,		% Change
	2015	2014	
	(in thousands)		
Recurring revenue	$ 624,989	$ 537,695	16%
Service and other sales revenue	22,700	21,980	3%
Activation fees	6,032	4,002	51%
Total revenues	$ 653,721	$ 563,677	16%

Total revenues increased $90.0 million, or 16%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014, primarily due to the growth in recurring revenue, which increased $87.3 million, or 16%. $65.9 million of the increase in recurring revenue was due to an increase in Total Subscribers and $22.4 million of the increase was due to increases in RPU. Recurring revenues associated with our wireless internet business increased $6.5 million for the year ended December 31, 2015 as compared to the year ended December 31, 2014. Currency translation negatively affected total revenues by $8.0 million, as computed on a constant currency basis.

Service and other sales revenue increased $0.7 million, or 3%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. This increase was primarily due to an increase of $1.0 million of contract fulfillment revenue partially offset by a decrease in upgrade revenue of $0.7 million related to subscriber service upgrades and purchases of additional equipment.

The revenue associated with activation fees is deferred upon billing and recognized over the estimated life of the subscriber relationship. There was deemed to be no fair value associated with deferred activation fee revenues at the time of the Acquisition. Thus, all activation fee revenue recognized in the years ended December 31, 2015 and 2014 relate to contracts generated after the Acquisition. Revenues recognized related to activation fees increased $2.0 million, or 51%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014, primarily due to the increase in the number of subscribers from whom we have collected activation fees since the date of the Acquisition.

Costs and Expenses

The following table provides the significant components of our costs and expenses for the years ended December 31, 2015 and 2014 :

	Year ended December 31,		
	2015	2014	% Change
	(in thousands)		
Operating expenses	$ 228,315	$ 202,769	13 %
Selling expenses	122,948	107,370	15 %
General and administrative	107,212	126,083	(15)%
Depreciation and amortization	244,724	221,324	11 %
Restructuring and asset impairment charges	59,197	—	NM
Total costs and expenses	$ 762,396	$ 657,546	16 %

Operating expenses increased $25.5 million, or 13%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014, primarily to support the growth in our subscriber base and our wireless internet business. This increase was primarily due to a $22.1 million increase in personnel costs related to customer services, field services, and monitoring and a $4.6 million increase in equipment costs related to servicing our wireless internet business and equipment costs related to subscriber upgrades. This increase was offset, in part, by a $2.9 million decrease in monitoring costs from third-party cellular providers primarily resulting from the transition to our Vivint Smart Home Cloud platform.

Selling expenses, excluding amortization of capitalized subscriber acquisition costs, increased $15.6 million, or 15%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014, primarily due to an increase in personnel costs of $9.4 million and a $5.4 million increase in expenses relating to lead generation, all to support the increase in our subscriber contract originations.

General and administrative expenses decreased $18.9 million, or 15%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014, partly due to a non-cash gain of $12.2 million in connection with the settlement of the Merger-related escrow (See Note 14 to the accompanying consolidated financial statements), a $7.8 million decrease in brand recognition expenses and a decrease of $5.3 million in contracted information technology services. These decreases were partially offset by a $3.0 million increase in personnel costs and an increase of $1.3 million in legal, audit and other professional service fees.

Depreciation and amortization increased $23.4 million, or 11%, for the year ended December 31, 2015 as compared to the year ended December 31, 2014. The increase was primarily due to increased amortization of subscriber acquisition costs arising from the growth in our subscriber base.

Restructuring and asset impairment charges for the year ended December 31, 2015 relate to the transition in our Wireless Internet business from a 5Ghz to a 60Ghz-based network technology (See Note 3 to the accompanying consolidated financial statements).

Other Expenses, net

The following table provides the significant components of our other expenses, net, for the years ended December 31, 2015 and 2014 :

	Year ended December 31,		
	2015	2014	% Change
	(in thousands)		
Interest expense	$ 161,339	$ 147,511	9%
Interest income	(90)	(1,455)	NM
Other loss (income), net	8,832	(1,779)	NM
Total other expenses, net	$ 170,081	$ 144,277	18%

Interest expense increased $13.8 million, or 9%, for the year ended December 31, 2015, as compared with the year ended December 31, 2014, due to a higher principal balance on our debt resulting from the issuance of $300 million of 2022 private placement notes in October 2015, the full year impact of the $100 million in 2020 notes issued in July 2014 and borrowings in 2015 under our revolving credit facility.

Other loss (income), net increased by $10.6 million primarily as a result of a change in treatment of losses on intercompany balances. Prior to July 2015, we classified intercompany receivable balances with our Canada and New Zealand subsidiaries as long-term investments with translation gains and losses recorded in other comprehensive income. Beginning in July 2015, as part of our cash management strategy we determined that settlement of these intercompany balances was anticipated and therefore these balances are not considered to be long-term investments and any subsequent translation gains or losses are recorded in income.

Income Taxes

The following table provides the significant components of our income tax expense for the years ended December 31, 2015 and 2014 :

	Year ended December 31,		
	2015	2014	% Change
	(in thousands)		
Income tax expense	$ 351	$ 514	(32)%

Income tax expense decreased $0.2 million, or 32%, for the year ended December 31, 2015, as compared with the year ended December 31, 2014. Our tax expense for the years ended December 31, 2015 and 2014 was primarily due to state and foreign income taxes.

Unaudited Quarterly Results of Operations

The following tables present our unaudited quarterly consolidated results of operations for the four quarters ended December 31, 2016 and 2015 . This unaudited quarterly consolidated information has been prepared on the same basis as our audited consolidated financial statements and, in the opinion of management, the statement of operations data includes all adjustments, consisting of normal recurring adjustments, necessary for the fair presentation of the results of operations for these periods. You should read these tables in conjunction with our audited consolidated financial statements and related notes located elsewhere in this annual report on Form 10-K. The results of operations for any quarter are not necessarily indicative of the results of operations for a full year or any future periods.

	Three Months Ended			
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016
	(in thousands)			
Statement of operations data				
Revenue	$ 204,512	$ 198,335	$ 180,807	$ 174,253
Loss from operations	(16,818)	(17,736)	(32,873)	(3,675)
Net loss	(71,168)	(69,974)	(89,722)	(45,093)

	Three Months Ended			
	December 31, 2015	September 30, 2015	June 30, 2015	March 31, 2015 (1)
	(in thousands)			
Statement of operations data				
Revenue	$ 175,034	$ 168,577	$ 157,913	$ 152,197
Loss from operations	(15,929)	(78,159)	(4,888)	(9,699)
Net loss	(62,375)	(125,072)	(43,614)	(48,046)

(1) During the three months ended March 31, 2015, we recorded certain out-of-period adjustments totaling $2.0 million, primarily associated with the timing of the recognition of deferred revenue related to 2014 recurring monitoring services. As a result of these adjustments, recurring revenues increased for the three months ended March 31, 2015 and deferred revenue decreased by $2.0 million, respectively.

Liquidity and Capital Resources

Our primary source of liquidity has historically been cash from operations, proceeds from the issuance of debt securities, borrowing availability under our revolving credit facility and, to a lesser extent, capital contributions. As of December 31, 2016 , we had $43.5 million of cash and cash equivalents and $283.7 million of availability under our revolving credit facility (after giving effect to $5.7 million of letters of credit outstanding and no borrowings).

As market conditions warrant, we and our equity holders, including the Sponsor, its affiliates and members of our management, may from time to time, seek to purchase our outstanding debt securities or loans, including the notes and borrowings under our revolving credit facility, in privately negotiated or open market transactions, by tender offer or otherwise. Subject to any applicable limitations contained in the agreements governing our indebtedness, any purchases made by us may be funded by the use of cash on our balance sheet or the incurrence of new secured or unsecured debt, including additional borrowings under our revolving credit facility. The amounts involved in any such purchase transactions, individually or in the aggregate, may be material. Any such purchases may be with respect to a substantial amount of a particular class or series of debt, with the attendant reduction in the trading liquidity of such class or series. In addition, any such purchases made at prices below the "adjusted issue price" (as defined for U.S. federal income tax purposes) may result in taxable cancellation of indebtedness income to us, which amounts may be material, and in related adverse tax consequences to us. Depending on conditions in the credit and capital markets and other factors, we will, from time to time, consider various financing transactions, the proceeds of which could be used to refinance our indebtedness or for other purposes. For example, in May 2016, we repurchased approximately $205 million of the 2019 notes in privately negotiated transactions in conjunction with the issuance of the 2022 notes. Additionally, in February 2017 we issued an additional $300.0 million aggregate principal amount of the 2022 notes at a price of 108.250% . We used the net proceeds from the offering of these 2022 notes to redeem $300.0 million aggregate principal amount of the existing 2019 notes and pay the related redemption premium, and to pay all fees and expenses related thereto and will use any remaining proceeds for general corporate purposes.

Capital Contribution

In April 2016, Parent completed the first installment of an issuance and sale to certain investors of a series of preferred stock and contributed the net proceeds from such issuance of $69.8 million to us as an equity contribution. In July 2016, Parent completed the final installment of the issuance and sale to certain investors of such series of preferred stock and, in August 2016, contributed the net proceeds from such issuance of $30.6 million to us as an equity contribution. Both issuances were private placements exempt from registration under the U.S. Securities Act of 1933, as amended (the "Securities Act").

Cash Flow and Liquidity Analysis

Significant factors influencing our liquidity position include cash flows generated from recurring revenue and other fees received from the subscribers we service and the level of investment in capitalized subscriber acquisition costs and general and administrative expenses. Our cash flows provided by operating activities include cash received from RPU, along with upfront activation fees, upgrade and other maintenance and repair fees. Cash used in operating activities includes the cash costs to monitor and service those subscribers, a portion of subscriber acquisition costs and general and administrative costs. Historically, we financed subscriber acquisition costs through our operating cash flows, the issuance of debt, and to a lesser extent, through the issuance of equity and contract sales to third parties. Going forward, we expect the Vivint Flex Pay program to offset a portion of the upfront investment associated with subscriber acquisition costs.

Our direct-to-home sales are seasonal in nature. We make investments in the recruitment of our direct-to-home sales force and the inventory for the April through August sales period prior to each sales season. We experience increases in subscriber acquisition costs, as well as costs to support the sales force throughout North America, during this time period.

The following table provides a summary of cash flow data (in thousands):

	Year ended December 31,		
	2016	2015	2014
Net cash used in operating activities	$ (365,706)	$ (255,307)	$ (309,637)
Net cash used in investing activities	(15,147)	(35,615)	(36,284)
Net cash provided by financing activities	422,280	284,400	95,057

Cash Flows from Operating Activities

We generally reinvest the cash flows from recurring revenue into our business, primarily to (1) maintain and grow our subscriber base (2) expand our infrastructure to support this growth (3) enhance our existing service offerings and (4) develop new service offerings. These investments are focused on generating new subscribers, increasing the revenue from our existing subscriber base, enhancing the overall quality of service provided to our subscribers, increasing the productivity and efficiency of our workforce and back-office functions necessary to scale our business.

For the year ended December 31, 2016 , net cash used in operating activities was $365.7 million . This cash used was primarily from a net loss of $276.0 million , adjusted for $302.9 million in non-cash amortization, depreciation, and stock-based compensation, a $24.6 million increase in deferred revenue due to the increased subscriber base, a provision for doubtful accounts of $19.6 million , a $12.7 million increase in accrued expenses and other liabilities due primarily from increases in accrued interest on our long term debt, a $10.1 million loss on early extinguishment of debt and $7.1 million in non-cash restructuring and asset impairment charges. This was offset by a $419.5 million increase in subscriber acquisition costs, a $24.3 million increase in accounts receivable, a $11.8 million increase in inventories, a $3.0 million decrease in accounts payable due primarily to the timing of inventory purchases, a $5.2 million increase in prepaid expenses and other current assets, and a $2.8 million decrease in the restructuring liability.

For the year ended December 31, 2015 , net cash used in operating activities was $255.3 million. This cash used was primarily from a net loss of $279.1 million, adjusted for (1) $245.5 million in non-cash amortization, depreciation, stock-based compensation, a non-cash gain on settlement of the Merger-related escrow, and (2) $57.7 million restructuring and asset impairment charge related to our Wireless Internet business transition, along with a $21.8 million increase in accounts payable, primarily related to purchases of inventory and wireless internet equipment, a $18.6 million decrease in inventories, a $18.0 million increase in accrued expenses and other liabilities, a $14.9 million provision for doubtful accounts and a $15.0 million increase in fees paid by our subscribers in advance of when the associated revenue is recognized. This was offset by a $354.9 million increase in subscriber acquisition costs and a $14.4 million increase in accounts receivable.

For the year ended December 31, 2014 , net cash used in operating activities was $309.6 million. This cash used was primarily from a net loss of $238.7 million, adjusted for $232.5 million in non-cash amortization, depreciation and stock-based compensation, $317.5 million in capitalized subscriber acquisition costs and a $21.9 million increase in accounts receivable, primarily related to the growth in our revenues and timing of our billing cycle. This was partially offset by a $20.6 million increase in fees paid by subscribers in advance of when the associated revenue is recognized.

Our outstanding debt as of December 31, 2016 was approximately $2.5 billion , approximately $1.3 billion of which was attributable to the transactions related to Blackstone's acquisition in November 2012. Net cash interest paid for the years ended December 31, 2016 , 2015 and 2014 related to our indebtedness (excluding capital leases) totaled $188.1 million , $144.9

million and $136.9 million , respectively. Our net cash used in operating activities for the years ended December 31, 2016 , 2015 and 2014 , before these interest payments, was $177.6 million , $110.4 million and $172.7 million , respectively. Accordingly, our net cash provided by operating activities for the years ended December 31, 2016 , 2015 and 2014 was insufficient to cover these interest payments. For additional information regarding our outstanding indebtedness see "—Long-Term Debt" below.

Cash Flows from Investing Activities

Historically, our investing activities have primarily consisted of capital expenditures, business combinations and technology acquisitions. Capital expenditures primarily consist of periodic additions to property and equipment to support the growth in our business.

For the year ended December 31, 2016 , net cash used in investing activities was $15.1 million . This cash used primarily consisted of capital expenditures of $11.6 million and capitalized subscriber acquisition costs of $5.2 million , partially offset by proceeds from the sales of capital assets of $3.1 million .

For the year ended December 31, 2015 , net cash used in investing activities was $35.6 million, consisting primarily of capital expenditures of $27.0 million, a portion of which related to our wireless internet infrastructure, and capitalized subscriber acquisition costs of $24.7 million associated with equipment we own. This was offset by $14.2 million released from restricted cash.

For the year ended December 31, 2014 , net cash used in investing activities was $36.3 million, consisting primarily of capital expenditures of $30.5 million, a portion of which related to our wireless internet infrastructure, strategic acquisitions of $18.5 million related to Wildfire Broadband, LLC and Space Monkey and the acquisition of certain patents and other intangible assets of $9.6 million and capitalized subscriber acquisition costs of $10.6 million associated with equipment we own. This was offset by net cash of $22.7 million received in connection with the notes receivable from Solar (see Note 14 of our accompanying consolidated financial statements included elsewhere in this annual report on Form 10-K for additional information) and $14.4 million released from restricted cash.

Cash Flows from Financing Activities

Historically, our cash flows provided by financing activities primarily related to the issuance of debt and, to a lesser extent, from capital contributions from Parent, all to fund the portion of upfront costs associated with generating new subscribers that are not covered through our operating cash flows. Uses of cash for financing activities are generally associated with the payment of dividends to our stockholders and the repayment of debt.

For the year ended December 31, 2016 , net cash provided by financing activities was $422.3 million , consisting primarily of $604.0 million in borrowings on notes, $100 million of proceeds from capital contributions from Parent, and $57.0 million in borrowings on the revolving credit facility. This was offset with $235.5 million of repayments on notes, $77.0 million of repayments on the revolving credit facility, $18.3 million in financing costs and $8.3 million of repayments under our capital lease obligations.

For the year ended December 31, 2015 , net cash provided by financing activities was $284.4 million, consisting primarily of $296.3 million in proceeds from the issuance in October 2015 of the 2022 private placement notes, offset by $6.4 million of repayments of capital lease obligations and $5.4 million in deferred financing costs.

For the year ended December 31, 2014 , net cash provided by financing activities was $95.1 million, consisting primarily of $102.0 million in proceeds from the issuance in July 2014 of additional 2020 notes, $32.3 million of equity contributions and $20.0 million in borrowings from our revolving credit facility, partially offset by $50.0 million of payments of dividends.

Long-Term Debt

We are a highly leveraged company with significant debt service requirements. As of December 31, 2016 , we had approximately $2,519.5 million of aggregate principal total debt outstanding, consisting of $719.5 million of outstanding 2019 notes, $930.0 million of outstanding 2020 notes, $270 million of outstanding 2022 private placement notes and $600.0 million of outstanding 2022 notes. In addition, we issued $300 million of additional 2022 notes in the first fiscal quarter of 2017.

2019 Notes

On November 16, 2012, we issued $925.0 million of the 2019 notes. Interest on the 2019 notes is payable semi-annually in arrears on each June 1 and December 1. In May 2016, we repurchased approximately $205 million of the 2019 notes using proceeds from the issuance of the 2022 notes. In February 2017, we issued an additional $300.0 million aggregate principal amount of the 2022 notes and used the net proceeds from the offering of these 2022 notes to redeem $300.0 million aggregate principal amount of the existing 2019 notes and pay the related redemption premium, and to pay all fees and expenses related thereto and will use any remaining proceeds for general corporate purposes.

From and after December 1, 2015, we may, at our option, redeem at any time and from time to time some or all of the 2019 notes at 104.781%, declining ratably on each anniversary thereafter to par from and after December 1, 2018, in each case, plus any accrued and unpaid interest to the date of redemption.

2020 Notes

On November 16, 2012, we issued $380.0 million of the 2020 notes. Interest on the 2020 notes is payable semi-annually in arrears on each June 1 and December 1. During the year ended December 31, 2013, we issued an additional $450.0 million of the 2020 notes and on July 1, 2014, we issued an additional $100.0 million of the 2020 notes, each under the indenture dated as of November 16, 2012.

From and after December 1, 2015, we may, at our option, redeem at any time and from time to time some or all of the 2020 notes at 106.563%, declining ratably on each anniversary thereafter to par from and after December 1, 2018, in each case, plus any accrued and unpaid interest to the date of redemption.

2022 Private Placement Notes

On October 19, 2015, we issued $300.0 million aggregate principal amount of our 2022 private placement notes. Interest on the 2022 private placement notes will be payable semi-annually in arrears on June 1 and December 1 of each year, commencing on June 1, 2016. In May 2016, we repurchased $30 million in principal amounts of the 2022 private placement notes using proceeds from the issuance of the 2022 notes.

We may, at our option, redeem at any time and from time to time prior to December 1, 2018, some or all of the 2022 private placement notes at 100% of their principal amount thereof plus accrued and unpaid interest to the redemption date plus a “make-whole premium.” From and after December 1, 2018, we may, at our option, redeem at any time and from time to time some or all of the 2022 private placement notes at 104.500%, declining to par from and after December 1, 2019, in each case, plus any accrued and unpaid interest to the date of redemption. In addition, on or prior to December 1, 2018, we may, at our option, redeem up to 35% of the aggregate principal amount of the 2022 private placement notes with the proceeds from certain equity offerings at 108.875%, plus accrued and unpaid interest to the date of redemption. At any time and from time to time prior to December 1, 2018, we may at our option redeem during each 12-month period commencing with the issue date on October 19, 2015 up to 10% of the aggregate principal amount of the 2022 private placement notes at a redemption price equal to 103% of the aggregate principal amount of the 2022 private placement notes redeemed, plus accrued and unpaid interest, to the redemption date.

2022 Notes

On May 26, 2016, we issued $500.0 million aggregate principal amount of our 2022 notes. On August 17, 2016 we issued an additional $100 million of our 2022 notes at a price of 104.00%. Interest on the 2022 notes will be payable semi-annually in arrears on June 1 and December 1 of each year, commencing on December 1, 2016.

We may, at our option, redeem at any time and from time to time prior to December 1, 2018, some or all of the 2022 notes at 100% of their principal amount thereof plus accrued and unpaid interest to the redemption date plus a “make-whole premium.” From and after December 1, 2018, we may, at our option, redeem at any time and from time to time some or all of the 2022 notes at 103.938%, declining to par from and after December 1, 2020, in each case, plus any accrued and unpaid interest to the date of redemption. In addition, on or prior to December 1, 2018, we may, at our option, redeem up to 35% of the aggregate principal amount of the 2022 notes with the proceeds from certain equity offerings at 107.875%, plus accrued and unpaid interest to the date of redemption. At any time and from time to time prior to December 1, 2018, we may at our option redeem during each 12-month period commencing on the issue date of May 26, 2016 up to 10% of the aggregate principal amount of the 2022 notes at a redemption price equal to 103% of the aggregate principal amount of the 2022 notes redeemed, plus accrued and unpaid interest, to the redemption date.

Revolving Credit Facility

On November 16, 2012, we entered into a $200.0 million senior secured revolving credit facility, with a five year maturity. We may request one or more term loan facilities, increased commitments under the revolving credit facility or new revolving credit commitments, in an aggregate amount not to exceed $225.0 million. Availability of such incremental facilities and/or increased or new commitments will be subject to certain customary conditions.

On June 28, 2013, we amended and restated the credit agreement to provide for a new repriced tranche of revolving credit commitments with a lower interest rate. Nearly all of the existing tranches of revolving credit commitments was terminated and converted into the repriced tranche, with the unterminated portion of the existing tranche continuing to accrue interest at the original higher rate.

On March 6, 2015, we amended and restated the credit agreement to provide for, among other things, (1) an increase in the aggregate commitments previously available to us from $200.0 million to $289.4 million and (2) the extension of the maturity date with respect to certain of the previously available commitments. As of December 31, 2016 we had $283.7 million of availability under the revolving line of credit facility (after giving effect to $5.7 million of letters of credit outstanding and no borrowings).

Borrowings under the amended and restated revolving credit facility bear interest at a rate per annum equal to an applicable margin plus, at our option, either (1) the base rate determined by reference to the highest of (a) the Federal Funds rate plus 0.50%, (b) the prime rate of Bank of America, N.A. and (c) the LIBOR rate determined by reference to the costs of funds for U.S. dollar deposits for an interest period of one month, plus 1.00% or (2) the LIBOR rate determined by reference to the London interbank offered rate for dollars for the interest period relevant to such borrowing. The applicable margin for base rate-based borrowings (1)(a) under the Series A Revolving Commitments of approximately $247.5 million and Series C Revolving Commitments of approximately $20.8 million is currently 2.0% per annum and (b) under the Series B Revolving Commitments of approximately $21.2 million is currently 3.0% and (2)(a) the applicable margin for LIBOR rate-based borrowings (a) under the Series A Revolving Commitments and Series C Revolving Commitments is currently 3.0% per annum and (b) under the Series B Revolving Commitments is currently 4.0%. The applicable margin for borrowings under the revolving credit facility is subject to one step-down of 25 basis points based on our meeting a consolidated first lien net leverage ratio test at the end of each fiscal quarter.

In addition to paying interest on outstanding principal under the revolving credit facility, we are required to pay a quarterly commitment fee (which will be subject to one step-down based on our meeting a consolidated first lien net leverage ratio test) to the lenders under the revolving credit facility in respect of the unutilized commitments thereunder. We also pay customary letter of credit and agency fees.

We are not required to make any scheduled amortization payments under the revolving credit facility. The principal amount outstanding under the revolving credit facility will be due and payable in full on (1) with respect to the non-extended commitments under the Series C Revolving Credit Facility, November 16, 2017 and (2) with respect to the extended commitments under the Series A Revolving Credit Facility and Series B Revolving Credit Facility, March 31, 2019.

Guarantees and Security

All of our obligations under the revolving credit facility, the 2019 notes, the 2020 notes, the 2022 private placement notes and the 2022 notes are guaranteed by APX Group Holdings, Inc. and each of our existing and future material wholly-owned U.S. restricted subsidiaries to the extent such entities guarantee indebtedness under the revolving credit facility or our other indebtedness. See Note 17 of our accompanying consolidated financial statements included elsewhere in this annual report on Form 10-K for additional financial information regarding guarantors and non-guarantors.

The obligations under the revolving credit facility, the 2019 notes, the 2022 private placement notes and the 2022 notes are secured by a security interest in (i) substantially all of the present and future tangible and intangible assets of APX Group, Inc., and the guarantors, including without limitation equipment, subscriber contracts and communication paths, intellectual property, fee-owned real property, general intangibles, investment property, material intercompany notes and proceeds of the foregoing, subject to permitted liens and other customary exceptions, (ii) substantially all personal property of APX Group, Inc. and the guarantors consisting of accounts receivable arising from the sale of inventory and other goods and services (including related contracts and contract rights, inventory, cash, deposit accounts, other bank accounts and securities accounts), inventory and intangible assets to the extent attached to the foregoing books and records of the Issuer and the guarantors, and the proceeds thereof, subject to permitted liens and other customary exceptions, in each case held by the Issuer and the guarantors and (iii) a pledge of all of the capital stock of APX Group, Inc., each of its subsidiary guarantors and each restricted subsidiary of APX Group, Inc. and its subsidiary guarantors, in each case other than excluded assets and subject to the limitations and exclusions provided in the applicable collateral documents.

Under the terms of the applicable security documents and intercreditor agreement, the proceeds of any collection or other realization of collateral received in connection with the exercise of remedies will be applied first to repay amounts due under the revolving credit facility, and up to an additional $60.0 million of "superpriority" obligations that we may incur in the future, before the holders of the 2019 notes, the 2022 private placement notes and the 2022 notes receive any such proceeds.

Debt Covenants

The credit agreement governing the revolving credit facility and the debt agreements governing the notes contain a number of covenants that, among other things, restrict, subject to certain exceptions, our and our restricted subsidiaries' ability to:

- incur or guarantee additional debt or issue disqualified stock or preferred stock;
- pay dividends and make other distributions on, or redeem or repurchase, capital stock;
- make certain investments;
- incur certain liens;
- enter into transactions with affiliates;
- merge or consolidate;
- enter into agreements that restrict the ability of restricted subsidiaries to make dividends or other payments to APX Group, Inc.;
- designate restricted subsidiaries as unrestricted subsidiaries; and
- transfer or sell assets.

The credit agreement governing the revolving credit facility and the debt agreements governing the notes contain change of control provisions and certain customary affirmative covenants and events of default. As of December 31, 2016 , we were in compliance with all restrictive covenants related to our long-term obligations.

Subject to certain exceptions, the credit agreement governing the revolving credit facility and the debt agreements governing the notes permit us and our restricted subsidiaries to incur additional indebtedness, including secured indebtedness.

Our future liquidity requirements will be significant, primarily due to debt service requirements. The actual amounts of borrowings under the revolving credit facility will fluctuate from time to time. We believe that amounts available through our revolving credit facility and incremental facilities will be sufficient to meet our operating needs for the next twelve months, including working capital requirements, capital expenditures, debt repayment obligations and potential new acquisitions.

Covenant Compliance

Under the debt agreements governing our notes and the credit agreement governing our revolving credit facility, our ability to engage in activities such as incurring additional indebtedness, making investments, refinancing certain indebtedness, paying dividends and entering into certain merger transactions is governed, in part, by our ability to satisfy tests based on Adjusted EBITDA.

"Adjusted EBITDA" is defined as net income (loss) before interest expense (net of interest income), income and franchise taxes and depreciation and amortization (including amortization of capitalized subscriber acquisition costs), further adjusted to exclude the effects of certain contract sales to third parties, non-capitalized subscriber acquisition costs, stock based compensation and certain unusual, non-cash, non-recurring and other items permitted in certain covenant calculations under the indentures governing our notes and the credit agreement governing our revolving credit facility.

We believe that the presentation of Adjusted EBITDA is appropriate to provide additional information to investors about the calculation of, and compliance with, certain financial covenants in the indentures governing our notes and the credit agreement governing our revolving credit facility. We caution investors that amounts presented in accordance with our definition of Adjusted EBITDA may not be comparable to similar measures disclosed by other issuers, because not all issuers and analysts calculate Adjusted EBITDA in the same manner.

Adjusted EBITDA is not a measurement of our financial performance under GAAP and should not be considered as an alternative to net income (loss) or any other performance measures derived in accordance with GAAP or as an alternative to cash flows from operating activities as a measure of our liquidity.

The following table sets forth a reconciliation of net loss to Adjusted EBITDA (in thousands):

	Year ended December 31,		
	2016	2015	2014
Net loss	$ (275,957)	$ (279,107)	$ (238,660)
Interest expense, net	197,533	161,248	146,056
Non-capitalized subscriber acquisition costs (1)	175,948	164,013	134,995
Amortization of capitalized subscriber acquisition costs	154,877	92,993	58,730
Depreciation and amortization (2)	133,666	151,731	162,594
Other expense (income)	7,255	8,832	(1,779)
Non-cash compensation (3)	3,999	2,544	1,887
Restructuring and asset impairment charge (4)	1,013	59,197	—
Income tax expense (benefit)	67	351	514
Other adjustments (5)	45,697	25,344	45,078
Adjusted EBITDA	$ 444,098	$ 387,146	$ 309,415

(1) Reflects subscriber acquisition costs that are expensed as incurred because they are not directly related to the acquisition of specific subscribers. Certain other industry participants purchase subscribers through subscriber contract purchases, and as a result, may capitalize the full cost to purchase these subscriber contracts, as compared to our organic generation of new subscribers, which requires us to expense a portion of our subscriber acquisition costs under GAAP.
(2) Excludes loan amortization costs that are included in interest expense.
(3) Reflects non-cash compensation costs related to employee and director stock and stock option plans.
(4) Reflects costs associated with the restructuring and asset impairment charges related to the transition of our Wireless Internet business and the 2016 Contract Sales (See Note 3 to the accompanying consolidated financial statements).
(5) Other adjustments represent primarily the following items (in thousands):

	Year ended December 31,		
	2016	2015	2014
Product development (a)	$ 24,189	$ 16,423	$ 17,442
Non-operating legal and professional fees	6,399	3,369	883
Purchase accounting deferred revenue fair value adjustment (b)	4,410	4,710	5,274
Monitoring fee (c)	3,746	3,580	3,177
Information technology implementation (d)	3,745	1,876	3,196
One-time compensation-related payments (e)	1,017	6,617	6,112
Non-cash gain on settlement of Merger-related escrow (f)	—	(12,200)	—
One-time deferred revenue adjustment (g)	—	(2,023)	—
Excess Inventory (h)	—	733	—
Start-up of new strategic initiatives (i)	—	392	3,251
CMS technology impairment loss (j)	—	—	1,351
Subcontracted monitoring agreement (k)	—	—	2,225
All other adjustments	2,191	1,867	2,167
Total other adjustments	$ 45,697	$ 25,344	$ 45,078

(a) Costs related to the development of our proprietary equipment and software and Wireless Internet Technology.
(b) Add back revenue reduction directly related to purchase accounting deferred revenue adjustments.
(c) Blackstone Management Partners L.L.C. monitoring fee (See Note 14 to the accompanying consolidated financial statements).
(d) Costs related to the implementation of new information technologies.
(e) Run-rate savings related to December 2014 reduction-in-force ("RIF"), the Wireless Restructuring reduction-in-force, along with severance payments associated with the RIFs and other non-recurring employee compensation payments.
(f) Gain related to settlement of escrow balance related to the Merger (See Note 14 to the accompanying consolidated financial statements).

(g) Represents a one-time adjustment to exclude $2.0 million of recurring revenue recognized during the year ended December 31, 2015, related to prior periods in connection with deferred revenue. (See Note 2 to the accompanying consolidated financial statements.)
(h) Represents reserve for excess inventory associated with discontinued product offerings.
(i) Costs related to the start-up of potential new service offerings and sales channels.
(j) CMS technology impairment loss.
(k) Run-rate savings from committed future reductions in subcontract monitoring fees.

Other Factors Affecting Liquidity and Capital Resources

Vehicle Leases. Since 2010, we have leased, and expect to continue leasing, vehicles primarily for use by our SHPs. For the most part, these leases have 36 month durations and we account for them as capital leases. At the end of the lease term for each vehicle we have the option to either (i) purchase it for the estimated end-of-lease fair market value established at the beginning of the lease term; or (ii) return the vehicle to the lessor to be sold by them and in the event the sale price is less than the estimated end-of-lease fair market value we are responsible for such deficiency. As of December 31, 2016 , our total capital lease obligations were $17.7 million , of which $9.8 million is due within the next 12 months.

Aircraft Lease. In December 2012, we entered into an aircraft lease agreement for the use of a corporate aircraft, which is accounted for as an operating lease. Upon execution of the lease, we paid a $5.9 million security deposit which is refundable at the end of the lease term. Beginning January 2013, we are required to make 156 monthly rental payments of approximately $83,000 each. In January 2015, an amendment to the agreement was made which, among other changes, increased the required monthly rental payments to approximately $87,000 each. We also have the option to extend the lease for an additional 36 months upon expiration of the initial term. The lease agreement also provides us the option to purchase the aircraft on certain specified dates for a stated dollar amount, which represents the current estimated fair value as of the purchase date.

Off-Balance Sheet Arrangements

Currently we do not engage in off-balance sheet financing arrangements.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2016 . Certain contractual obligations are reflected on our consolidated balance sheet, while others are disclosed as future obligations under GAAP.

	Payments Due by Period				
	Total	Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years
			(dollars in thousands)		
Long-term debt obligations (1)	$ 2,519,465	$ —	$ 719,465	$ 930,000	$ 870,000
Interest on long-term debt (2)	878,700	200,145	396,258	217,019	65,278
Capital lease obligations	18,696	10,513	8,166	17	—
Operating lease obligations	122,013	17,452	30,320	26,607	47,634
Purchase obligations (3)	61,400	15,138	14,512	10,125	21,625
Other long-term obligations	62,052	7,713	16,751	15,859	21,729
Total contractual obligations	$ 3,662,326	$ 250,961	$ 1,185,472	$ 1,199,627	$ 1,026,266

(1) As of December 31, 2016 , there were no borrowings under our revolving credit facility. At December 31, 2016 , our revolving credit facility provided for availability of $289.4 million . The principal amount outstanding under the revolving credit facility will be due and payable in full on (1) with respect to the non-extended commitments under the Series C Revolving Credit Facility, November 16, 2017 and (2) with respect to the extended commitments under the Series A Revolving Credit Facility and Series B Revolving Credit Facility, March 31, 2019. As of December 31, 2016 , there was approximately $283.7 million of availability under our revolving credit facility (after giving effect to $5.7 million of outstanding letters of credit and no borrowings).
(2) Represents aggregate interest payments on aggregate principal amounts of $719.5 million of the outstanding 2019 notes, $930.0 million of outstanding 2020 notes, $270.0 million of the outstanding 2022 private placement notes, and

$600.0 million of the outstanding 2022 notes as well as letter of credit and commitment fees for the unused portion of our revolving credit facility. Does not reflect interest payments on future borrowings under our revolving credit facility.

(3) Purchase obligations consist of commitments for purchases of goods and services that are not already included in our consolidated balance sheet as of December 31, 2016 . We have contingent liabilities related to legal proceedings and other matters arising in the ordinary course of business. Although it is reasonably possible we may incur losses upon conclusion of such matters, an estimate of any loss or range of loss cannot be made at this time. In the opinion of management, it is expected that amounts, if any, which may be required to satisfy such contingencies will not be material in relation to the accompanying consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our operations include activities in the United States and Canada. Historically, we had immaterial operations in New Zealand. These operations expose us to a variety of market risks, including the effects of changes in interest rates and foreign currency exchange rates. We monitor and manage these financial exposures as an integral part of our overall risk management program.

Interest Rate Risk

In connection with the Transactions, we entered into a revolving credit facility that bears interest at a floating rate. As a result, we may be exposed to fluctuations in interest rates to the extent of our borrowings under the revolving credit facility. Our long-term debt portfolio is expected to primarily consist of fixed rate instruments. To help manage borrowing costs, we may from time to time enter into interest rate swap transactions with financial institutions acting as principal counterparties. Assuming the borrowing of all amounts available under our revolving credit facility, if interest rates related to our revolving credit facility increase by 1% due to normal market conditions, our interest expense will increase by approximately $2.9 million per annum. We had no borrowings under the revolving credit facility as of December 31, 2016 .

Foreign Currency Risk

We have exposure to the effects of foreign currency exchange rate fluctuations on the results of our Canadian operations. Our Canadian operations use the Canadian dollar to conduct business but our results are reported in U.S. dollars. Historically, our operations in New Zealand were immaterial to our overall operating results and we ceased operations in the geographical region during the year ended December 31, 2016 . We are exposed periodically to the foreign currency rate fluctuations that affect transactions not denominated in the functional currency of our U.S. and Canadian operations. Based on our results of our Canadian operations for the year ended December 31, 2016 , if foreign currency exchange rates had decreased 10% throughout the year, our revenues would have decreased by approximately $5.7 million , our total assets would have decreased by $13.9 million and our total liabilities would have decreased by $9.7 million . We do not currently use derivative financial instruments to hedge investments in foreign subsidiaries. For the year ended December 31, 2016 , before intercompany eliminations, approximately $57.4 million of our revenues, $139.4 million of our total assets and $96.9 million of our total liabilities were denominated in Canadian Dollars.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors
APX Group Holdings, Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheets of APX Group Holdings, Inc. and Subsidiaries as of December 31, 2016 and 2015 , and the related consolidated statements of operations, comprehensive loss, changes in equity (deficit), and cash flows for each of the three years in the period ended December 31, 2016 . These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of APX Group Holdings, Inc. and Subsidiaries at December 31, 2016 and 2015 , and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 , in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Salt Lake City, Utah
March 2, 2017

APX Group Holdings, Inc. and Subsidiaries
Consolidated Balance Sheets
(In thousands, except share and per-share amounts)

	December 31, 2016	December 31, 2015
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 43,520	$ 2,559
Accounts receivable, net	12,891	8,060
Inventories	38,452	26,321
Prepaid expenses and other current assets	10,158	10,626
Total current assets	105,021	47,566
Property and equipment, net	63,626	55,274
Subscriber acquisition costs, net	1,052,434	790,644
Deferred financing costs, net	4,420	6,456
Intangible assets, net	475,392	558,395
Goodwill	835,233	834,416
Long-term investments and other assets, net	11,536	10,893
Total assets	$ 2,547,662	$ 2,303,644
LIABILITIES AND STOCKHOLDERS’ (DEFICIT) EQUITY		
Current Liabilities:		
Accounts payable	$ 49,119	$ 52,207
Accrued payroll and commissions	46,288	38,247
Accrued expenses and other current liabilities	34,265	35,573
Deferred revenue	45,722	34,875
Current portion of capital lease obligations	9,797	7,616
Total current liabilities	185,191	168,518
Notes payable, net	2,486,700	2,118,112
Revolving line of credit	—	20,000
Capital lease obligations, net of current portion	7,935	11,171
Deferred revenue, net of current portion	58,734	44,782
Other long-term obligations	47,080	10,530
Deferred income tax liabilities	7,204	7,524
Total liabilities	2,792,844	2,380,637
Commitments and contingencies (See Note 13)		
Stockholders’ deficit:		
Common stock, $0.01 par value, 100 shares authorized; 100 shares issued and outstanding	—	—
Additional paid-in capital	731,920	627,645
Accumulated deficit	(948,339)	(672,382)
Accumulated other comprehensive loss	(28,763)	(32,256)
Total stockholders’ deficit	(245,182)	(76,993)
Total liabilities and stockholders’ deficit	$ 2,547,662	$ 2,303,644

See accompanying notes to consolidated financial statements

APX Group Holdings, Inc. and Subsidiaries
Consolidated Statements of Operations
(In thousands)

	Year ended December 31,		
	2016	2015	2014
Revenues:			
Recurring revenue	$ 724,478	$ 624,989	$ 537,695
Service and other sales revenue	22,855	22,700	21,980
Activation fees	10,574	6,032	4,002
Total revenues	757,907	653,721	563,677
Costs and expenses:			
Operating expenses (exclusive of depreciation and amortization shown separately below)	264,865	228,315	202,769
Selling expenses	131,421	122,948	107,370
General and administrative expenses	143,168	107,212	126,083
Depreciation and amortization	288,542	244,724	221,324
Restructuring and asset impairment charges	1,013	59,197	—
Total costs and expenses	829,009	762,396	657,546
Loss from operations	(71,102)	(108,675)	(93,869)
Other expenses (income):			
Interest expense	197,965	161,339	147,511
Interest income	(432)	(90)	(1,455)
Other loss (income), net	7,255	8,832	(1,779)
Loss before income taxes	(275,890)	(278,756)	(238,146)
Income tax expense	67	351	514
Net loss	$ (275,957)	$ (279,107)	$ (238,660)

See accompanying notes to consolidated financial statements

APX Group Holdings, Inc. and Subsidiaries
Consolidated Statements of Comprehensive Loss
(In thousands)

	Year ended December 31,		
	2016	2015	2014
Net loss	$ (275,957)	$ (279,107)	$ (238,660)
Other comprehensive income (loss), net of tax effects:			
Foreign currency translation adjustment	2,482	(13,293)	(11,333)
Unrealized gain on marketable securities	1,011	—	—
Total other comprehensive income (loss)	3,493	(13,293)	(11,333)
Comprehensive loss	$ (272,464)	$ (292,400)	$ (249,993)

See accompanying notes to consolidated financial statements

APX Group Holdings, Inc. and Subsidiaries
Consolidated Statements of Changes in Equity (Deficit)
(In thousands)

	Common Stock	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Total
Balance, December 31, 2013	$ —	$ 652,488	$ (154,615)	$ (7,630)	$ 490,243
Net loss	—	—	(238,660)	—	(238,660)
Foreign currency translation adjustment	—	—	—	(11,333)	(11,333)
Stock-based compensation	—	1,936	—	—	1,936
Capital contribution	—	32,300	—	—	32,300
Cash dividends paid	—	(50,000)	—	—	(50,000)
Balance, December 31, 2014	—	636,724	(393,275)	(18,963)	224,486
Net Loss	—	—	(279,107)	—	(279,107)
Foreign currency translation adjustment	—	—	—	(13,293)	(13,293)
Stock-based compensation	—	3,121	—	—	3,121
Escrow adjustment	—	(12,200)	—	—	(12,200)
Balance, December 31, 2015	—	627,645	(672,382)	(32,256)	(76,993)
Net Loss	—	—	(275,957)	—	(275,957)
Foreign currency translation adjustment	—	—	—	2,482	2,482
Unrealized gain on marketable securities	—	—	—	1,011	1,011
Stock-based compensation	—	3,868	—	—	3,868
Capital contribution	—	100,407	—	—	100,407
Balance, December 31, 2016	$ —	$ 731,920	$ (948,339)	$ (28,763)	$ (245,182)

See accompanying notes to consolidated financial statements

APX Group Holdings, Inc. and Subsidiaries
Consolidated Statements of Cash Flows
(In thousands)

	Year ended December 31,		
	2016	**2015**	**2014**
Cash flows from operating activities:			
Net loss from operations	$ (275,957)	$ (279,107)	$ (238,660)
Adjustments to reconcile net loss to net cash used in operating activities of operations:			
Amortization of subscriber acquisition costs	154,877	92,994	58,730
Amortization of customer relationships	108,178	125,451	143,578
Depreciation and amortization of other intangible assets	25,488	26,279	19,016
Amortization of deferred financing costs and bond premiums and discounts	10,447	9,844	9,251
Non-cash gain on settlement of Merger-related escrow	—	(12,200)	—
(Gain) Loss on sale or disposal of assets	(33)	(54)	662
Loss on early extinguishment of debt	10,085	—	—
Loss on asset impairment	—	—	3,116
Stock-based compensation	3,868	3,121	1,936
Provision for doubtful accounts	19,624	14,924	15,656
Deferred income taxes	(478)	(41)	(265)
Restructuring and asset impairment charges	7,126	59,197	—
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable	(24,338)	(14,421)	(21,866)
Inventories	(11,827)	18,591	(2,355)
Prepaid expenses and other current assets	(5,165)	1,450	746
Subscriber acquisition costs – deferred contract costs	(419,509)	(354,867)	(317,538)
Other assets	368	160	—
Accounts payable	(2,978)	21,842	8,481
Accrued expenses and other current liabilities	12,702	18,019	(10,895)
Restructuring liability	(2,797)	(1,515)	—
Deferred revenue	24,613	15,026	20,770
Net cash used in operating activities	(365,706)	(255,307)	(309,637)
Cash flows from investing activities:			
Subscriber acquisition costs – company owned equipment	(5,243)	(24,740)	(10,580)
Capital expenditures	(11,642)	(26,982)	(30,500)
Proceeds from the sale of capital assets	3,123	480	964
Net cash used in acquisitions	—	—	(18,500)
Acquisition of intangible assets	(1,385)	(1,363)	(9,649)
Proceeds from insurance claims	—	2,984	—
Purchases of short-term investments	—	—	(60,000)
Proceeds from sale of short-term investments	—	—	60,069
Proceeds from note receivable	—	—	22,699
Change in restricted cash	—	14,214	14,375
Investment in preferred stock	—	—	(3,000)
Acquisition of other assets	—	(208)	(2,162)
Net cash used in investing activities	(15,147)	(35,615)	(36,284)

See accompanying notes to consolidated financial statements

APX Group Holdings, Inc. and Subsidiaries
Consolidated Statements of Cash Flows Continued
(In thousands)

	Year ended December 31,		
	2016	2015	2014
Cash flows from financing activities:			
Proceeds from notes payable	$ 604,000	$ 296,250	$ 102,000
Repayments of notes payable	(235,535)	—	—
Borrowings from revolving line of credit	57,000	271,000	20,000
Repayments on revolving line of credit	(77,000)	(271,000)	—
Proceeds from sale of subscriber contracts	—	—	2,261
Acquisition of subscriber contracts	—	—	(2,277)
Repayments of capital lease obligations	(8,315)	(6,414)	(6,300)
Financing costs	(9,036)	—	—
Deferred financing costs	(9,241)	(5,436)	(2,927)
Payments of dividends	—	—	(50,000)
Proceeds from capital contributions	100,407	—	32,300
Net cash provided by financing activities	422,280	284,400	95,057
Effect of exchange rate changes on cash	(466)	(1,726)	(234)
Net increase (decrease) in cash and cash equivalents	40,961	(8,248)	(251,098)
Cash and cash equivalents:			
Beginning of period	2,559	10,807	261,905
End of period	$ 43,520	$ 2,559	$ 10,807
Supplemental cash flow disclosures:			
Income tax paid	$ 435	$ 290	$ 196
Interest paid	$ 189,170	$ 145,647	$ 137,908
Supplemental non-cash investing and financing activities:			
Capital lease additions	$ 8,411	$ 11,002	$ 12,040
Intangible assets acquisitions included within accounts payable, accrued expenses and other current liabilities and other long-term obligations	$ 31,283	$ 314	$ 185
Capital expenditures included within accounts payable, accrued expenses and other current liabilities	$ 2,345	$ 161	$ 1,893
Change in fair value of marketable securities	$ 1,011	$ —	$ —
Property acquired under build-to-suit agreements included within other long-term obligations	$ 4,619	$ —	$ —
Subscriber acquisition costs – company owned assets included within accounts payable and accrued expenses and other current liabilities	$ 12	$ —	$ 1,719

See accompanying notes to consolidated financial statements

APX Group Holdings, Inc. and Subsidiaries
Notes to Consolidated Financial Statements

NOTE 1 —DESCRIPTION OF BUSINESS

APX Group Holdings, Inc. (“Holdings” or “Parent”), and its wholly-owned subsidiaries, (collectively the “Company”), is one of the largest smart home companies in North America. The Company is engaged in the sale, installation, servicing and monitoring of smart home and security systems, primarily in the United States and Canada. Holdings, which is wholly-owned by APX Parent Holdco, Inc., which is owned by 313 Acquisition, LLC. APX Parent Holdco, Inc. and APX Group Holdings, Inc. have no operations.

NOTE 2 —SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The Company has prepared the accompanying consolidated financial statements pursuant to generally accepted accounting principles in the United States (“GAAP”). Preparing financial statements requires the Company to make estimates and assumptions that affect the amounts that are reported in the consolidated financial statements and accompanying disclosures. Although these estimates are based on the Company’s best knowledge of current events and actions that the Company may undertake in the future, actual results may be different from the Company’s estimates. The results of operations presented herein are not necessarily indicative of the Company’s results for any future period.

During the year ended December 31, 2015, the Company recorded certain out-of-period adjustments totaling $2.0 million , primarily associated with the timing of the recognition of deferred revenue related to 2014 recurring monitoring services. As a result of these adjustments, recurring revenues increased for the year ended December 31, 2015 and deferred revenue decreased by 2.0 million , respectively. The Company evaluated the impact of the out-of-period adjustments and determined that they are immaterial to the consolidated financial statements for the year ended December 31, 2015.

Change in Accounting Estimate —Effective April 1, 2016, the Company updated its estimate of the life of its subscriber relationships and the period and pattern used to amortize deferred activation fees and deferred subscriber acquisition costs, to better approximate the actual life of the customer attrition patterns. Prior to the change, the Company amortized deferred activation fees and subscriber acquisition costs over 12 years using a 150% declining balance method, which converted to a straight-line methodology after approximately five years . Subsequent to the change, the Company amortizes deferred activation fees and subscriber acquisition costs over 15 years using a 240% declining balance method, which converts to a straight-line methodology after approximately nine years when the resulting amortization exceeds that from the accelerated method. The effects of this change in estimate were as follows (in thousands):

	Year ended December 31, 2016	
Increase in activation fee revenues	$	1,400
Increase in depreciation and amortization		21,413
Increase to loss from operations		20,013
Increase to net loss		19,621

Restructuring and Asset Impairment Charges —Restructuring and asset impairment charges represent expenses incurred in relation to activities to exit or dispose of portions of the Company's business that do not qualify as discontinued operations. Liabilities associated with restructuring are measured at their fair value when the liability is incurred. Expenses for related termination benefits are recognized at the date the Company notifies the employee, unless the employee must provide future service, in which case the benefits are expensed ratably over the future service period. Liabilities related to termination of a contract are measured and recognized at fair value when the contract does not have any future economic benefit to the entity and the fair value of the liability is determined based on the present value of the remaining obligation. The Company expenses all other costs related to an exit or disposal activity as incurred (See Note 3).

Principles of Consolidation —The accompanying consolidated financial statements include the accounts of APX Group Holdings, Inc. and its subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Changes in Presentation of Comparative Financial Statements — Certain reclassifications have been made to the Company’s consolidated financial information in order to conform to the current year presentation. These changes did not have a significant impact on the consolidated financial statements.

Revenue Recognition —The Company recognizes revenue principally on three types of transactions: (i) recurring revenue, which includes revenues for monitoring and other smart home services of the Company’s subscriber contracts and recurring monthly revenue associated with Vivint Wireless Inc. (“Wireless Internet” or “Wireless”), (ii) service and other sales, which includes non-recurring service fees charged to subscribers provided on contracts, contract fulfillment revenues and sales of products that are not part of the Company's service offerings, and (iii) activation fees on subscriber contracts, which are amortized over the expected life of the customer.

Recurring revenue for the Company’s subscriber contracts is billed in advance, generally monthly, pursuant to the terms of subscriber contracts and recognized ratably over the service period. Costs of providing ongoing recurring services are expensed in the period incurred.

Service and other sales revenue is recognized as services are provided or when title to the products and equipment sold transfers to the customer. Contract fulfillment revenue, included in service and other sales, is recognized when payment is received from customers who cancel their contract in-term. Revenue from sales of products that are not part of the basic service offering is generally recognized upon delivery of products.

Activation fees represent upfront one-time charges billed to subscribers at the time of installation and are deferred and recognized over the expected customer life. The Company evaluates subscriber account attrition on a periodic basis, utilizing observed attrition rates for the Company’s subscriber contracts and industry information and, when necessary, makes adjustments to the estimated subscriber relationship period and amortization method.

Subscriber Acquisition Costs —Subscriber acquisition costs represent the costs related to the origination of new subscribers. A portion of subscriber acquisition costs is expensed as incurred, which includes costs associated with the direct-to-home sale housing, marketing and recruiting, certain portions of sales commissions (residuals), overhead and other costs, considered not directly and specifically tied to the origination of a particular subscriber. The remaining portion of the costs is considered to be directly tied to subscriber acquisition and consists primarily of certain portions of sales commissions, equipment, and installation costs. These costs are deferred and recognized in a pattern that reflects the estimated life of the subscriber relationships. The Company evaluates subscriber account attrition on a periodic basis, utilizing observed attrition rates for the Company’s subscriber contracts and industry information and, when necessary, makes adjustments to the estimated subscriber relationship period and amortization method.

On the consolidated statement of cash flows, subscriber acquisition costs that are comprised of equipment and related installation costs purchased for or used in subscriber contracts in which the Company retains ownership to the equipment are classified as investing activities and reported as “Subscriber acquisition costs – company owned equipment.” All other subscriber acquisition costs are classified as operating activities and reported as “Subscriber acquisition costs – deferred contract costs” on the condensed consolidated statements of cash flows as these assets represent deferred costs associated with customer contracts.

Cash and Cash Equivalents — Cash and cash equivalents consists of highly liquid investments with remaining maturities when purchased of three months or less.

Accounts Receivable —Accounts receivable consists primarily of amounts due from customers for recurring monthly monitoring services. The accounts receivable are recorded at invoiced amounts and are non-interest bearing. The gross amount of accounts receivable has been reduced by an allowance for doubtful accounts of $4.1 million and $3.5 million at December 31, 2016 and 2015 , respectively. The Company estimates this allowance based on historical collection experience and subscriber attrition rates. When the Company determines that there are accounts receivable that are uncollectible, they are charged off against the allowance for doubtful accounts. As of December 31, 2016 and 2015 , no accounts receivable were classified as held for sale. Provision for doubtful accounts is included in general and administrative expenses in the accompanying consolidated statements of operations.

The changes in the Company’s allowance for accounts receivable were as follows for the periods ended (in thousands):

	Year ended December 31,		
	2016	2015	2014
Beginning balance	$ 3,541	$ 3,373	$ 1,901
Provision for doubtful accounts	19,624	14,924	15,656
Write-offs and adjustments	(19,027)	(14,756)	(14,184)
Balance at end of period	$ 4,138	$ 3,541	$ 3,373

Inventories —Inventories, which are comprised of smart home and security system equipment and parts are stated at the lower of cost or market with cost determined under the first-in, first-out (FIFO) method. The Company adjusts the inventory balance based on anticipated obsolescence, usage and historical write-offs.

Long-lived Assets and Intangibles —Property and equipment are stated at cost and depreciated on the straight-line method over the estimated useful lives of the assets or the lease term for assets under capital leases, whichever is shorter. Intangible assets with definite lives are amortized over the remaining estimated economic life of the underlying technology or relationships, which ranges from 2 to 10 years. Definite-lived intangible assets are amortized on the straight-line method over the estimated useful life of the asset or in a pattern in which the economic benefits of the intangible asset are consumed. Amortization expense associated with leased assets is included with depreciation expense. Routine repairs and maintenance are charged to expense as incurred. The Company periodically assesses potential impairment of its long-lived assets and intangibles and performs an impairment review whenever events or changes in circumstances indicate that the carrying value may not be recoverable (See Note 8). In addition, the Company periodically assesses whether events or changes in circumstance continue to support an indefinite life of certain intangible assets or warrant a revision to the estimated useful life of definite-lived intangible assets.

Effective January 1, 2016, the Company adopted guidance issued by the FASB which provides new standards to determine whether a cloud computing arrangement includes a software license. The guidance requires the Company to determine if an internal use software obtained in a cloud hosting arrangement contains a contractual right to take possession of the software and if it is feasible to either run the software on internal hardware or contract with an unrelated vendor to host the software. If both criteria are met, the company will consider the arrangement to include a software license and classify the purchase as an intangible. The Company has elected to adopt the guidance prospectively to all arrangements entered into or materially modified after the beginning of 2016. The Company did not enter into, or modify, any material cloud computing arrangements during the year ended December 31, 2016.

Wireless Spectrum Licenses —The Company has capitalized as an intangible asset wireless spectrum licenses that were acquired from third parties. The cost basis of the wireless spectrum asset includes the purchase price paid for the licenses at the time of acquisition, plus costs incurred to acquire the licenses. The asset and related liability were recorded at the net present value of future cash outflows using the Company's incremental borrowing rate at the time of acquisition.

The Company has determined that the wireless spectrum licenses meet the definition of indefinite-lived intangible assets because the licenses may be renewed periodically for a nominal fee, provided that the Company continues to meet the service and geographic coverage provisions. The Company has also determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful lives of these wireless spectrum licenses.

Long-term Investments — The Company’s long-term investments are comprised of available-for-sale securities and cost based investments in other companies. As of December 31, 2016 and 2015 , cost-based investments totaled $0.4 million and $3.5 million , respectively. Available-for-sale securities as of of December 31, 2016 were $4.0 million . As of December 31, 2015, the Company held no available-for-sale securities.

The Company’s marketable equity securities have been classified and accounted for as available-for-sale. Management determines the appropriate classification of its investments at the time of purchase and reevaluates the classifications at each balance sheet date. Marketable equity securities, are classified as either short-term or long-term, based on the nature of each security and its availability for use in current operations. The Company’s marketable equity securities are carried at fair value, with unrealized gains and losses, reported as a component of accumulated other comprehensive income (“AOCI”) in equity, with the exception of unrealized losses believed to be other-than-temporary which are reported in earnings in the current period. The cost of securities sold is based upon the specific identification method.

The Company performs impairment analyses of its cost based investments when events occur or circumstances change that would, more likely than not, reduce the fair value of the investment below its carrying value. When indicators of impairment do not exist and certain accounting criteria are met, the Company evaluates impairment using a qualitative approach. As of December 31, 2016 , no indicators of impairment existed associated with these cost based investments.

Deferred Financing Costs — Costs incurred in connection with obtaining debt financing are deferred and amortized utilizing the straight-line method, which approximates the effective-interest method, over the life of the related financing. Deferred financing costs incurred with draw downs on APX's revolving credit facility will be amortized over the amended maturity dates discussed in Note 5 . If such financing is paid off or replaced prior to maturity with debt instruments that have substantially different terms, the unamortized costs are charged to expense. Deferred financing costs included in the accompanying consolidated balance sheets within deferred financing costs, net at December 31, 2016 and 2015 were $4.4 million and $6.5 million , net of accumulated amortization of $6.9 million and $4.8 million , respectively. Deferred financing costs included in the accompanying consolidated balance sheets within notes payable, net at December 31, 2016 and 2015 were $39.4 million and $40.2 million , net of accumulated amortization of $35.6 million and $26.1 million , respectively. Amortization expense on deferred financing costs recognized and included in interest expense in the accompanying consolidated statements of operations totaled $11.6 million , $10.9 million and $10.1 million for the years ended December 31, 2016 , 2015 and 2014 , respectively.

Effective January 1, 2016, the Company adopted guidance issued by the FASB requiring debt issuance costs related to a recognized debt liability to be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The Company has applied this retrospectively resulting in a reduction to deferred financing costs, net by $40.2 million as of December 31, 2015 with a corresponding decrease to notes payable, net.

Residual Income Plan —The Company has a program that allows third-party sales channel partners to receive additional compensation based on the performance of the underlying contracts they create. The Company calculates the present value of the expected future payments and recognizes this amount in the period the commissions are earned. Subsequent accretion and adjustments to the estimated liability are recorded as interest and operating expense respectively. The Company monitors actual payments and customer attrition on a periodic basis and, when necessary, makes adjustments to the liability. The amount included in accrued payroll and commissions was $1.2 million and $0.8 million as of December 31, 2016 and 2015 , respectively, and the amount included in other long-term obligations was $6.6 million and $4.3 million at December 31, 2016 and 2015 , respectively, representing the present value of the estimated amounts owed to third-party sales channel partners.

Stock-Based Compensation —The Company measures compensation cost based on the grant-date fair value of the award and recognizes that cost over the requisite service period of the awards (See Note 12).

Advertising Expense —Advertising costs are expensed as incurred. Advertising costs were approximately $33.0 million , $25.1 million and $23.6 million for the years ended December 31, 2016 , 2015 and 2014 , respectively.

Income Taxes —The Company accounts for income taxes based on the asset and liability method. Under the asset and liability method, deferred tax assets and deferred tax liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Valuation allowances are established when necessary to reduce deferred tax assets when it is determined that it is more likely than not that some portion of the deferred tax asset will not be realized.

The Company recognizes the effect of an uncertain income tax position on the income tax return at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. The Company’s policy for recording interest and penalties is to record such items as a component of the provision for income taxes.

Contracts Sold —On March 31, 2014, the Company received approximately $2.3 million in proceeds from the sale of certain subscriber contracts to a third-party. Concurrently, the Company entered into an agreement with the buyer to continue providing billing, monitoring and support services for the contracts that were sold for a period of ten years . On November 24, 2014, the Company repurchased the subscriber contracts from this third-party for $2.3 million and the associated liability was settled. Because of the Company's continuing involvement in servicing the contracts, no material gain/loss on the transaction was recognized.

During the year ended December 31, 2016, the Company sold all of its New Zealand and Puerto Rico subscriber contracts and ceased operations in these geographical regions ("2016 Contract Sales"). As a result, during the year ended December 31, 2016 the Company recorded the impact of these transactions in restructuring and asset impairment (See Note 3).

Concentrations of Credit Risk —Financial instruments that potentially subject the Company to concentration of credit risk consist principally of receivables and cash. At times during the year, the Company maintains cash balances in excess of insured limits. The Company is not dependent on any single customer or geographic location. The loss of a customer would not adversely impact the Company’s operating results or financial position.

Concentrations of Supply Risk —As of December 31, 2016 , approximately 57% of the Company’s installed panels were SkyControl panels and 40% were 2GIG Go!Control panels. In connection with the 2GIG Sale in April 2013, the Company entered into a five -year supply agreement with 2GIG, pursuant to which they will be the exclusive provider of the Company’s control panel requirements, subject to certain exceptions as provided in the supply agreement. The loss of 2GIG as a supplier could potentially impact the Company’s operating results or financial position.

Fair Value Measurement —Fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities subject to on-going fair value measurement are categorized and disclosed into one of three categories depending on observable or unobservable inputs employed in the measurement. These two types of inputs have created the following fair value hierarchy:

Level 1: Quoted prices in active markets that are accessible at the measurement date for assets and liabilities.

Level 2: Observable prices that are based on inputs not quoted in active markets, but corroborated by market data.

Level 3: Unobservable inputs are used when little or no market data is available.

This hierarchy requires the Company to minimize the use of unobservable inputs and to use observable market data, if available, when determining fair value. The Company recognizes transfers between levels of the hierarchy based on the fair values of the respective financial measurements at the end of the reporting period in which the transfer occurred. There were no transfers between levels of the fair value hierarchy during the years ended December 31, 2016 and 2015 .

The carrying amounts of the Company’s accounts receivable, accounts payable and accrued and other liabilities approximate their fair values due to their short maturities.

Goodwill —The Company conducts a goodwill impairment analysis annually in the fourth fiscal quarter, as of October 1, and as necessary if changes in facts and circumstances indicate that the fair value of the Company’s reporting units may be less than its carrying amount. When indicators of impairment do not exist and certain accounting criteria are met, the Company is able to evaluate goodwill impairment using a qualitative approach. When necessary, the Company’s quantitative goodwill impairment test consists of two steps. The first step requires that the Company compare the estimated fair value of its reporting units to the carrying value of the reporting unit’s net assets, including goodwill. If the fair value of the reporting unit is greater than the carrying value of its net assets, goodwill is not considered to be impaired and no further testing is required. If the fair value of the reporting unit is less than the carrying value of its net assets, the Company would be required to complete the second step of the test by analyzing the fair value of its goodwill. If the carrying value of the goodwill exceeds its fair value, an impairment charge is recorded. The Company found that no indicators of goodwill impairment existed during the year ended December 31, 2016 , thus a qualitative approach was used and it was determined that no impairment existed for goodwill.

Foreign Currency Translation and Other Comprehensive Income —The functional currencies of Vivint Canada, Inc. and Vivint New Zealand, Ltd. are the Canadian and New Zealand dollars, respectively. Accordingly, assets and liabilities are translated from their respective functional currencies into U.S. dollars at period-end rates and revenue and expenses are translated at the weighted-average exchange rates for the period. Adjustments resulting from this translation process are classified as other comprehensive (loss) income and shown as a separate component of equity.

When intercompany foreign currency transactions between entities included in the consolidated financial statements are of a long term investment nature (i.e., those for which settlement is not planned or anticipated in the foreseeable future) foreign currency translation adjustments resulting from those transactions are included in stockholders’ (deficit) equity as accumulated other comprehensive loss. When intercompany transactions are deemed to be of a short term nature, translation adjustments are required to be included in the consolidated statement of operations. Beginning in July 2015, we determined that settlement of these intercompany balances was anticipated and therefore these balances are not considered to be long-term investments and any subsequent translation gains or losses are recorded in income. Translation gains related to intercompany balances were $2.1 million for the year ended December 31, 2016 . Translation losses related to intercompany balances were $9.4 million for the year ended December 31, 2015 . During the year ended December 31, 2014 , there were no translation gains or losses.

Letters of Credit —As of December 31, 2016 and 2015 , the Company had $5.7 million and $5.0 million , respectively, of letters of credit issued in the ordinary course of business, all of which are undrawn.

New Accounting Pronouncements — In May 2014, the FASB originally issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)* which clarifies the principles used to recognize revenue for all entities. This guidance requires companies to recognize revenue when they transfer goods or services to a customer in an amount that reflects the consideration to which they expect to be entitled. In August 2015, the FASB issued ASU 2015-14 which deferred the effective date of ASU 2014-09 by one year to be effective for annual reporting periods beginning after December 15, 2017. In March 2016, the FASB issued ASU 2016-08 to clarify the implementation guidance on principal versus agent considerations as it relates to Topic 606. In June 2016, the FASB issued ASU 2016-10 to clarify the implementation guidance on identifying performance obligations and licensing as it relates to Topic 606. This update reduces the complexity when applying the guidance for identifying performance obligations and improves the operability and understandability of the license implementation guidance. In June 2016, the FASB issued ASU 2016-12 to clarify the implementation guidance on Topic 606, which amends the guidance on transition, collectability, non-cash consideration and the presentation of sales and other similar taxes.

The Company currently plans to adopt Topic 606 using the modified retrospective approach with the cumulative effect of initially applying the new standard recognized at the date of initial application and providing certain additional disclosures. However, a final decision regarding the adoption method has not been made at this time. The Company's final determination will depend on a number of factors, such as the significance of the impact of the new standard on the Company's financial results, system readiness, including the Company's ability to accumulate and analyze the information necessary to assess the impact on prior period financial statements, as necessary.

The Company is in the initial stages of evaluating the impact of the new standard on the accounting policies, processes, and system requirements. The Company has assigned internal resources in addition to the engagement of third party service providers to assist in the evaluation. Furthermore, the Company has made and will continue to make investments in systems to enable timely and accurate reporting under the new standard. The Company expects the standard to have an effect on the subscriber acquisitions costs, net and deferred revenues included in our condensed consolidated balance sheets and the recognition of revenues and amortization of subscriber acquisition costs on the consolidated statement of operations. The Company does not expect the standard to have a significant impact to the consolidated statements of changes in equity or the consolidated statements of cash flows.

While the Company continues to assess the potential impacts of the new standard, including the areas described above, and anticipate this standard could have a material impact on the consolidated financial statements, the Company does not know or cannot reasonably estimate quantitative information related to the impact of the new standard on the financial statements at this time.

In March 2016, the FASB issued ASU 2016-09 to simplify accounting for employee share-based payments. This update involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017 and will be applied prospectively and/or retrospectively, with early adoption permitted. The Company plans to adopt this update on the effective date and the adoption is not expected to materially impact the consolidated financial statements.

In March 2016, the FASB issued ASU 2016-07 which eliminates the requirement to retroactively adopt the equity method of accounting when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016 and must be applied prospectively, with early adoption permitted. The Company plans to adopt this update on the effective date and the adoption is not expected to materially impact the consolidated financial statements.

In March 2016, the FASB issued ASU 2016-06 to clarify the assessment of contingent put and call options in debt instruments as it relates to Derivatives and Hedging (Topic 815). The amendments in this update clarify the requirements for assessing whether contingent call (put) options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts. An entity performing the assessment under the amendments in this update is required to assess the embedded call (put) options solely in accordance with the four-step decision sequence. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016 and must be applied using a modified retrospective approach, with early adoption permitted. The Company plans to adopt this update on the effective date and it is not expected to materially impact the consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02 to increase transparency and comparability among organizations as it relates to lease assets and lease liabilities. The update requires that lease assets and lease liabilities be recognized on the balance sheet, and that key information about leasing arrangements be disclosed. Prior to this update, GAAP did not require operating leases to be recognized as lease assets and lease liabilities on the balance sheet. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018 and must be applied using a modified retrospective approach, with early adoption permitted. The Company is evaluating the new guidance and plans to provide additional information about its expected impact at a future date.

In January 2016, the FASB issued ASU 2016-01 to address certain aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The main provisions of this update require equity investments to be measured at fair value with changes in fair value recognized in earnings, allow a company to value equity investments without a readily determined fair value at cost, less any impairments, and simplify the assessment of impairments of equity investments without a readily determinable fair value by requiring a qualitative assessment. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. An entity should apply the amendments by means of a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. The amendments related to equity securities without readily determinable fair values (including disclosure requirements) should be applied prospectively to equity investments that exist as of the date of adoption of the Update. Early adoption is permitted. The Company is evaluating the new guidance and plans to provide additional information about its expected impact upon adoption at a future date.

NOTE 3 – RESTRUCTURING AND ASSET IMPAIRMENT CHARGES

During the year ended December 31, 2016, the Company sold all of its New Zealand and Puerto Rico contracts and recorded the impact of these transactions in restructuring and asset impairment. The calculation of the net loss recorded related to the 2016 Contract Sales included the expensing of all unamortized deferred subscriber acquisition costs associated with these subscriber accounts in the amount of $7.6 million , the realization of outstanding amounts of accumulated other comprehensive loss associated with the New Zealand foreign currency translation process of $1.1 million upon the substantial sale of the subsidiary, offset by cash proceeds of $6.2 million for a total net loss on the 2016 Contract Sales of $2.6 million .

During the year ended December 31, 2015, the board of directors approved a plan to transition the Company’s Wireless Internet business from a 5Ghz to a 60Ghz-based network technology (the “Wireless Restructuring”) and the Company ceased the build-out of 5Ghz networks and stopped the installation of new customers. During the year ended December 31, 2016, the Company shifted to test installations of the new 60Ghz technology. In connection with the Wireless Restructuring, the Company recorded restructuring and asset impairment charges consisting of asset impairments, the costs of employee severance, and other contract termination charges.

Restructuring and asset impairment charges were as follows (in thousands):

	Year ended December 31,	
	2016	**2015**
Wireless restructuring and asset (recoveries) impairment charges:		
Asset (recoveries) impairments	$ (710)	$ 53,228
Contract termination (recoveries) costs	(751)	4,767
Employee severance and termination benefits (recoveries) charges	(77)	1,202
Total wireless restructuring and asset (recoveries) impairment charges	(1,538)	59,197
Loss on subscriber contract sales	2,551	—
Total restructuring and asset impairment charges	$ 1,013	$ 59,197

During the year ended December 31, 2014, the Company did not incur any restructuring and asset impairment charges.

The following table presents accrued restructuring activity for the years ended December 31, 2016 and 2015 .

	Asset impairments	Contract termination costs	Employee severance and termination benefits	Total
Accrued restructuring balance as of December 31, 2014	$ —	$ —	$ —	$ —
Restructuring and impairment charges	53,228	4,767	1,202	59,197
Cash payments	(10)	(623)	(881)	(1,514)
Non-cash settlements	(53,218)	(190)	—	(53,408)
Accrued restructuring balance as of December 31, 2015	—	3,954	321	4,275
Restructuring and impairment recoveries	(710)	(751)	(77)	(1,538)
Cash payments	—	(2,554)	(244)	(2,798)
Non-cash settlements	710	—	—	710
Accrued restructuring balance as of December 31, 2016	$ —	$ 649	$ —	$ 649

The wireless restructuring and impairment recoveries during the year ended December 31, 2016 resulted primarily from a vendor settlement for amounts less than previously estimated. The Company recorded a non-cash asset impairment charge of $53.2 million during the year ended December 31, 2015. The Company also recorded cash-based restructuring charges of $6.0 million during the year ended December 31, 2015 related to employee severance and termination benefits as well as the write off of certain vendor contracts. Accrued restructuring at December 31, 2016 is included in current liabilities within accrued expenses and other current liabilities of $0.1 million and in long-term liabilities within other long-term obligations of $0.6 million .

Additional charges may be incurred in the future for facility-related or other restructuring activities as the Company continues to align resources to meet the needs of the business.

NOTE 4 —BUSINESS COMBINATIONS

Space Monkey Acquisition

On August 25, 2014 , the Company's parent purchased Space Monkey, Inc. ("Space Monkey"), a distributed cloud storage technology solution company, then merged Space Monkey with a wholly-owned subsidiary of the Company. Pursuant to the terms of the merger the Company paid aggregate cash consideration of $15.0 million , of which $1.5 million was held in escrow for indemnification obligations and was settled during 2015. This strategic acquisition was made to support the growth and development of the Company's smart home platform.

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed at the time of acquisition (in thousands):

Net assets acquired from Space Monkey	$ 404
Deferred tax liability	(1,106)
Intangible assets (See Note 8)	8,300
Goodwill	7,402
Total estimated fair value of the assets acquired and liabilities assumed	$ 15,000

During the year ended December 31, 2014, the Company incurred costs associated with the Space Monkey acquisition, which were not material, consisting of accounting, legal and professional fees and payments to employees directly associated with the acquisition. These costs are included in general and administrative expenses in the accompanying consolidated statements of operations. During the year ended December 31, 2016 and 2015, the Company did no t incur any costs associated with the Space Monkey acquisition. The associated goodwill is deductible for income tax purposes.

Wildfire Acquisition

On January 31, 2014 , a wholly-owned subsidiary of the Company completed the purchase of certain assets, and assumed certain liabilities, of Wildfire Broadband, LLC (“Wildfire”). Pursuant to the terms of the asset purchase agreement the Company paid aggregate cash consideration of $3.5 million , of which $0.4 million was held in escrow for indemnification obligations and was settled in early 2015. This strategic acquisition was made to provide the Company access to Wildfire’s existing customers, wireless internet infrastructure and know-how. The associated goodwill is deductible for income tax purposes.

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed at the time of acquisition (in thousands):

Net assets acquired from Wildfire	$	96
Intangible assets (See Note 8)		2,900
Goodwill		504
Total cash consideration	$	3,500

During the year ended December 31, 2014, the Company incurred costs associated with the Wildfire acquisition, which were not material, consisting of accounting, legal and professional fees and payments to employees directly associated with the acquisition. These costs are included in general and administrative expenses in the accompanying audited consolidated statements of operations. During the year ended December 31, 2015, the Company impaired all assets of the Wildfire acquisition as part of the Company’s wireless internet business restructuring (see Note 3). During the year ended December 31, 2016 , the Company did no t incur any costs associated with the Wildfire acquisition.

NOTE 5 —LONG-TERM DEBT

On November 16, 2012, APX issued $1.3 billion aggregate principal amount of notes, of which $719.5 million aggregate principal amount of 6.375% 2019 notes mature on December 1, 2019 and are secured on a first-priority lien basis by substantially all of the tangible and intangible assets whether now owned or hereafter acquired by the Company, subject to permitted liens and exceptions, and $380.0 million aggregate principal amount of 8.75% 2020 notes mature on December 1, 2020 .

During 2013, APX completed two offerings of additional 2020 notes under the indenture dated November 16, 2012. On May 31, 2013, APX issued $200.0 million of 2020 notes at a price of 101.75% and on December 13, 2013, APX issued an additional $250.0 million of 2020 notes at a price of 101.50% .

On July 1, 2014, APX issued an additional $100.0 million of 2020 notes at a price of 102.00% .

On October 19, 2015, APX issued $300.0 million aggregate principal amount of 8.875% 2022 private placement notes at a price of 98% , pursuant to a note purchase agreement dated as of October 19, 2015 in a private placement exempt from registration under the Securities Act. The 2022 private placement notes will mature on December 1, 2022, unless on September 1, 2020 (the 91st day prior to the maturity of the 2020 notes) more than an aggregate principal amount of $190.0 million of such 2020 notes remain outstanding or have not been refinanced as permitted under the note purchase agreement for the 2022 private placement notes, in which case the 2022 private placement notes will mature on September 1, 2020. The 2022 private placement notes are secured, on a pari passu basis, by the collateral securing obligations under the 2019 notes, the 2022 private placement notes, and the 2022 notes (as defined below) and the revolving credit facilities, in each case, subject to certain exceptions and permitted liens.

In May 2016, APX issued $500.0 million aggregate principal amount of 7.875% 2022 notes at par, pursuant to an indenture dated as of May 26, 2016 among APX, the guarantors party thereto and Wilmington Trust, National Association, as trustee and collateral agent. The 2022 notes will mature on December 1, 2022, or on such earlier date when any outstanding pari passu lien indebtedness matures as a result of the operation of any “Springing Maturity” provision set forth in the agreements governing such pari passu lien indebtedness. The 2022 notes are secured, on a pari passu basis, by the collateral securing obligations under the 2019 notes and 2022 private placement notes and the revolving credit facilities, in all cases, subject to certain exceptions and permitted liens. APX used a portion of the net proceeds from the issuance of the 2022 notes to repurchase approximately $235 million aggregate principal amount of the outstanding 2019 notes and 2022 private placement notes in privately negotiated transactions and repaid borrowings under the existing revolving credit facility.

In August 2016, APX issued an additional $100.0 million aggregate principal amount of the 2022 notes at a price of 104.00% .

In accordance with ASC 470-50 Debt – Modifications and Extinguishments, the Company performed an analysis on a creditor-by-creditor basis to determine if the repurchased 2019 notes and 2022 private placement notes were substantially different than the 2022 notes issued in May 2016. As a result of this analysis, during the year ended December 31, 2016 , the Company recorded $10.1 million of other expense and loss on extinguishment, consisting of $1.0 million of original issue discount and deferred financing costs associated with the 2019 notes and 2022 private placement notes, and $9.0 million of the $15.7 million of total costs incurred in conjunction with issuance of the 2022 notes. The original unamortized portion of deferred financing costs associated with new creditors and creditors under both the 2019 notes and the 2022 notes, whose debt instruments were not deemed to be substantially different, will be amortized to interest expense over the life of the 2022 notes. The following table presents deferred financing activity for the year ended December 31, 2016 (in thousands):

	Unamortized Deferred Financing Costs					
	Balance 12/31/2015	Additions	Refinances	Early Extinguishment	Amortized	Balance 12/31/2016
Revolving Credit Facility	$ 6,456	$ —	$ —	$ —	$ (2,036)	$ 4,420
2019 Notes	20,182	—	(3,423)	(585)	(4,481)	11,693
2020 Notes	18,892	—	—	—	(3,839)	15,053
2022 Private Placement Notes	1,170	—	—	(110)	(157)	903
2022 Notes	—	9,337	3,423	—	(1,046)	11,714
Total Deferred Financing Costs	$ 46,700	$ 9,337	$ —	$ (695)	$ (11,559)	$ 43,783

The notes are fully and unconditionally guaranteed, jointly and severally by APX and each of APX's existing restricted subsidiaries that guarantee indebtedness under APX's revolving credit facility or our other indebtedness. Interest accrues at the rate of 6.375% per annum for the 2019 notes, 8.75% per annum for the 2020 notes, 8.875% per annum for the 2022 private placement notes, and 7.875% per annum for the 2022 notes. Interest on the notes is payable semiannually in arrears on each June 1 and December 1. APX may redeem the notes at the prices and on the terms specified in the applicable indenture or note purchase agreement.

Revolving Credit Facility

On November 16, 2012, APX entered into a $200.0 million senior secured revolving credit facility, with a five year maturity. On March 6, 2015, APX amended and restated the credit agreement governing the revolving credit facility to provide for, among other things, (1) an increase in the aggregate commitments previously available to APX thereunder from $200.0 million to $289.4 million ("Revolving Commitments") and (2) the extension of the maturity date with respect to certain of the previously available commitments.

Borrowings under the amended and restated revolving credit facility bear interest at a rate per annum equal to an applicable margin plus, at APX's option, either (1) the base rate determined by reference to the highest of (a) the Federal Funds rate plus 0.50% , (b) the prime rate of Bank of America, N.A. and (c) the LIBOR rate determined by reference to the costs of funds for U.S. dollar deposits for an interest period of one month, plus 1.00% or (2) the LIBOR rate determined by reference to the London interbank offered rate for dollars for the interest period relevant to such borrowing. The applicable margin for base rate-based borrowings (1)(a) under the Series A Revolving Commitments of approximately $247.5 million and Series C Revolving Commitments of approximately $20.8 million is currently 2.0% per annum and (b) under the Series B Revolving Commitments of approximately $21.2 million is currently 3.0% and (2)(a) the applicable margin for LIBOR rate-based borrowings (a) under the Series A Revolving Commitments and Series C Revolving Commitments is currently 3.0% per annum and (b) under the Series B Revolving Commitments is currently 4.0% . The applicable margin for borrowings under the revolving credit facility is subject to one step-down of 25 basis points based on APX meeting a consolidated first lien net leverage ratio test at the end of each fiscal quarter. Outstanding borrowings under the amended and restated revolving credit facility are allocated on a pro-rata basis between each Series based on the total Revolving Commitments.

In addition to paying interest on outstanding principal under the revolving credit facility, APX is required to pay a quarterly commitment fee (which will be subject to one interest rate step-down of 12.5 basis points, based on APX meeting a consolidated first lien net leverage ratio test) to the lenders under the revolving credit facility in respect of the unutilized commitments thereunder. As of December 31, 2016 the commitment fee percentage was 0.50% . APX also pays customary letter of credit and agency fees.

APX is not required to make any scheduled amortization payments under the revolving credit facility. The principal amount outstanding under the revolving credit facility will be due and payable in full on (1) with respect to the non-extended commitments under the Series C Revolving Credit Facility, November 16, 2017 and (2) with respect to the extended commitments under the Series A Revolving Credit Facility and Series B Revolving Credit Facility, March 31, 2019.

As of December 31, 2016 there were no outstanding borrowings under the credit facility. As of December 31, 2015 the outstanding borrowings under the credit facility were $20.0 million .

The Company’s debt at December 31, 2016 consisted of the following (in thousands):

	Outstanding Principal	Unamortized Premium (Discount)	Unamortized Deferred Financing Costs	Net Carrying Amount
6.375% Senior Secured Notes due 2019	$ 719,465	$ —	$ (11,693)	$ 707,772
8.75% Senior Notes due 2020	930,000	5,848	(15,053)	920,795
8.875% Senior Secured Notes Due 2022	270,000	(2,960)	(903)	266,137
7.875% Senior Secured Notes Due 2022	600,000	3,710	(11,714)	591,996
Total Notes payable	$ 2,519,465	$ 6,598	$ (39,363)	$ 2,486,700

The Company’s debt at December 31, 2015 consisted of the following (in thousands):

	Outstanding Principal	Unamortized Premium	Unamortized Deferred Financing Costs	Net Carrying Amount
Series C Revolving Credit Facility Due 2017	$ 1,440	$ —	$ —	$ 1,440
Series A, B Revolving Credit Facilities Due 2019	18,560	—	—	18,560
6.375% Senior Secured Notes due 2019	925,000	—	(20,182)	904,818
8.75% Senior Notes due 2020	930,000	7,060	(18,892)	918,168
8.875% Senior Secured Notes due 2022	300,000	(3,704)	(1,170)	295,126
Total Notes payable	$ 2,175,000	$ 3,356	$ (40,244)	$ 2,138,112

NOTE 6 —BALANCE SHEET COMPONENTS

The following table presents material balance sheet component balances as of December 31, 2016 and December 31, 2015 (in thousands):

	December 31, 2016	December 31, 2015
Subscriber acquisition costs		
Subscriber acquisition costs	$ 1,373,080	$ 958,261
Accumulated amortization	(320,646)	(167,617)
Subscriber acquisition costs, net	$ 1,052,434	$ 790,644
Accrued payroll and commissions		
Accrued payroll	$ 24,101	$ 18,071
Accrued commissions	22,187	20,176
Total accrued payroll and commissions	$ 46,288	$ 38,247
Accrued expenses and other current liabilities		
Accrued interest payable	$ 16,944	$ 17,153
Accrued payroll taxes and withholdings	4,793	3,938
Accrued taxes	3,376	2,683
Wireless restructuring costs	91	4,275
Loss contingencies	2,571	2,504
Other	6,490	5,020
Total accrued expenses and other current liabilities	$ 34,265	$ 35,573

NOTE 7 —PROPERTY PLANT AND EQUIPMENT

Property and equipment consisted of the following (in thousands):

	December 31, 2016	December 31, 2015	Estimated Useful Lives
Vehicles	$ 31,416	$ 26,935	3-5 years
Computer equipment and software	27,006	21,702	3-5 years
Leasehold improvements	17,717	17,434	2-15 years
Office furniture, fixtures and equipment	13,508	11,776	7 years
Buildings	702	702	39 years
Construction in process	9,908	3,837	
Build-to-suit lease asset under construction	5,004	—	
	105,261	82,386	
Accumulated depreciation and amortization	(41,635)	(27,112)	
Property plant and equipment, net	$ 63,626	$ 55,274	

Property plant and equipment includes approximately $21.2 million and $20.4 million of assets under capital lease obligations, net of accumulated amortization of $10.9 million and $7.0 million at December 31, 2016 and 2015 , respectively. Depreciation and amortization expense on all property plant and equipment was $16.8 million , $16.9 million and $11.3 million for the years ended December 31, 2016 , 2015 and 2014 , respectively. Amortization expense relates to assets under capital leases as included in depreciation and amortization expense.

Because of its involvement in certain aspects of the construction of a new sales recruiting and training facility in Logan, UT, the Company is deemed to be the owner of the building for accounting purposes during the construction period. Accordingly, the Company recorded a build-to-suit asset of $5.0 million as of December 31, 2016 . See Note 13 -Commitments and Contingencies for more information on build-to-suit arrangements.

NOTE 8 —GOODWILL AND INTANGIBLE ASSETS

Goodwill

The changes in the carrying amount of goodwill for the years ended December 31, 2016 and 2015 , were as follows (in thousands):

Balance as of January 1, 2015	$	841,522
Goodwill Impaired due to Wireless Restructuring (see Note 3)		(2,270)
Effect of Foreign Currency Translation		(4,836)
Balance as of December 31, 2015		834,416
Effect of Foreign Currency Translation		817
Balance as of December 31, 2016	$	835,233

As of December 31, 2016 and December 31, 2015 , the Company had a goodwill balance of $835.2 million and $834.4 million , respectively. Foreign currency translation adjustments were $0.8 million and $4.8 million for the years ended December 31, 2016 and December 31, 2015 , respectively. In connection with the Wireless Restructuring (See Note 3), the Company fully impaired goodwill related to its Wireless Internet business. The resulting impairment charge of $2.3 million is included in restructuring and asset impairment charges on the consolidated statement of operations during the year ended December 31, 2015. Accumulated impairment losses were $2.3 million as of December 31, 2016 and 2015 , respectively.

Intangible assets, net

The following table presents intangible asset balances as of December 31, 2016 and 2015 (in thousands):

	December 31, 2016			December 31, 2015			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Estimated Useful Lives
Definite-lived intangible assets:							
Customer contracts	$ 965,179	$ (539,910)	$ 425,269	$ 962,842	$ (430,803)	$ 532,039	10 years
2GIG 2.0 technology	17,000	(10,479)	6,521	17,000	(7,064)	9,936	8 years
Other technology	7,067	(4,984)	2,083	7,067	(3,438)	3,629	5 - 7 years
Space Monkey technology	7,100	(2,268)	4,832	7,100	(761)	6,339	6 years
Patents	8,724	(3,913)	4,811	7,524	(2,094)	5,430	5 years
Non-compete agreements	1,200	(1,200)	—	1,200	(800)	400	2 - 3 years
Total definite-lived intangible assets:	1,006,270	(562,754)	443,516	1,002,733	(444,960)	557,773	
Indefinite-lived intangible assets:							
Spectrum licenses	31,253	—	31,253	—	—	—	
IP addresses	564	—	564	564	—	564	
Domain names	59	—	59	58	—	58	
Total Indefinite-lived intangible assets	31,876	—	31,876	622	—	622	
Total intangible assets, net	$ 1,038,146	$ (562,754)	$ 475,392	$ 1,003,355	$ (444,960)	$ 558,395	

During the year ended December 31, 2016 , the Company entered into leasing agreements with a third party for designated radio frequency spectrum in 40 mid-sized metropolitan markets. The initial lease term is for seven years, with an option to obtain title of the applicable spectrum licenses at the end of this initial term for a nominal fee. The Company acquired $31.3 million of spectrum licenses, measured using the present value of the lease payments, and recorded an intangible asset and a corresponding liability within other long-term obligations. While licenses are issued for only a fixed time, such licenses are subject to renewal by the Federal Communications Commission. The Company intends to renew the licenses at the end of the initial term. License renewals within the industry have occurred routinely and at nominal cost. Moreover, the Company has determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful life of the licenses. As a result, the Company treats the wireless licenses as an indefinite-lived intangible asset.

Identifiable intangible assets acquired by the Company in connection with the Wildfire acquisition were $2.1 million of customer contracts and $0.8 million associated with non-compete agreements entered into by certain former members of Wildfire management. In connection with the Wireless Restructuring (See Note 3), the Company fully impaired the remaining unamortized definite-lived intangible assets related to its Wireless Internet business. The resulting impairment charge of $2.9 million is included in restructuring and asset impairment charges on the consolidated statement of operations during the year ended December 31, 2015.

Identifiable intangible assets acquired by the Company in connection with the Space Monkey acquisition were $7.1 million of Space Monkey technology and $1.2 million associated with non-compete agreements entered into by certain former members of Space Monkey management.

During the year ended December 31, 2016 , the Company acquired $1.3 million of intangibles related to patents. During the year ended December 31, 2015 , the Company acquired $1.4 million of intangibles related to patents, domain names and Internet Protocol (“IP”) addresses.

The Company recognized amortization expense related to capitalized software development costs of $1.1 million , $1.3 million and $1.3 million during the years ended December 31, 2016 , 2015 , and 2014 , respectively. Amortization expense related to intangible assets was approximately $116.9 million , $134.8 million and $151.3 million for the years ended December 31, 2016 , 2015 , and 2014 , respectively.

As of December 31, 2016 , the remaining weighted-average amortization period for definite-lived intangible assets was 3.8 years . Estimated future amortization expense of intangible assets, excluding approximately $0.3 million in patents currently in process, is as follows as of December 31, 2016 (in thousands):

2017	$ 101,296
2018	89,736
2019	78,082
2020	67,288
2021	58,288
Thereafter	48,548
Total estimated amortization expense	$ 443,238

NOTE 9 —FAIR VALUE MEASUREMENTS

Cash equivalents and available-for-sale securities are classified as level 1 assets, as they have readily available market prices in an active market. As of December 31, 2016 the Company held $42.3 million of money market funds and $4.0 million of corporate securities classified as level 1 investments. As of December 31, 2015 , the Company held an immaterial amount of money market funds classified as level 1 investments.

The following tables show the Company's cash and cash equivalents and available-for-sale securities' adjusted cost, gross unrealized gains, gross unrealized losses and fair value by significant investment category recorded as cash and cash equivalents or long-term investments and other assets, net as of December 31, 2016 (in thousands):

	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cash and Cash Equivalents	Long-Term Investments and Other Assets, net
Cash	$ 1,191	$ —	$ —	$ 1,191	$ 1,191	$ —
Level 1:						
Money market funds	42,329	—	—	42,329	42,329	—
Corporate securities	3,007	1,011	—	4,018	—	4,018
Subtotal	45,336	1,011	—	46,347	42,329	4,018
Total	$ 46,527	$ 1,011	$ —	$ 47,538	$ 43,520	$ 4,018

On February 19, 2014, the Company invested $3.0 million in preferred stock of a privately held company ("investee") not affiliated with the Company. On October 28, 2016 the investee began trading shares publicly and the Company's preferred stock was converted to public stock. As a result, the Company classified the investment as an available for sale security.

The carrying amounts of the Company's accounts receivable, accounts payable and accrued and other liabilities approximate their fair values due to their short maturities.

Components of long-term debt including the associated interest rates and related fair values (in thousands, except interest rates) are as follows:

	December 31, 2016		December 31, 2015		
Issuance	Face Value	Estimated Fair Value	Face Value	Estimated Fair Value	Stated Interest Rate
2019 Notes	$ 719,465	$ 743,783	$ 925,000	$ 879,906	6.375%
2020 Notes	930,000	946,275	930,000	756,788	8.75%
2022 Notes Private Placement Notes	270,000	280,372	300,000	296,296	8.875%
2022 Notes	600,000	655,140	—	—	7.875%
Total	$ 2,519,465	$ 2,625,570	$ 2,155,000	$ 1,932,990	

The fair value of the 2019 notes, 2020 notes, 2022 private placement notes and the 2022 notes was considered a Level 2 measurement as the value was determined using observable market inputs, such as current interest rates as well as prices observable from less active markets.

NOTE 10 —FACILITY FIRE

On March 18, 2014, a fire occurred at a facility leased by the company in Lindon, Utah. This facility contained the Company's primary inventory warehouse and call center operations. The Company recognized gross expenses related to the fire of $8.3 million , which were primarily related to impairment of damaged assets and recovery costs to maintain business continuity. The Company also received insurance recoveries of $8.8 million , related to the fire damage, $3.0 million of which related to the reconstruction of the facility damaged by the fire, and is included within the Company's cash flows from investing activities in the consolidated statement of cash flows for the year ended December 31, 2015. Insurance recoveries associated with the reconstruction of the damaged facility exceeded its net book value by $0.5 million . These excess insurance recoveries were included in other income as of December 31, 2014. All insurance recoveries have been received as of December 31, 2016 . Expenses in excess of insurance recoveries during the year ended December 31, 2016 and 2015 were immaterial.

NOTE 11 —INCOME TAXES

APX Group files a consolidated federal income tax return with its wholly-owned subsidiaries.

Income tax provision consisted of the following (in thousands):

	Year ended December 31,		
	2016	2015	2014
Current income tax:			
Federal	$ —	$ —	$ —
State	545	392	779
Foreign	95	(1)	—
Total	640	391	779
Deferred income tax:			
Federal	—	—	(925)
State	—	—	(181)
Foreign	(573)	(40)	841
Total	(573)	(40)	(265)
Provision for income taxes	$ 67	$ 351	$ 514

The following reconciles the tax expense computed at the statutory federal rate and the Company's tax expense (in thousands):

	Year ended December 31,		
	2016	2015	2014
Computed expected tax expense	$ (93,770)	$ (94,737)	$ (81,107)
State income taxes, net of federal tax effect	360	259	395
Foreign income taxes	(949)	202	1,645
Other reconciling items	666	—	—
Permanent differences	1,688	1,980	2,261
Change in valuation allowance	92,072	92,647	77,320
Provision for income taxes	$ 67	$ 351	$ 514

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities were as follows (in thousands):

	December 31, 2016	December 31, 2015
Gross deferred tax assets:		
Net operating loss carryforwards	$ 799,302	$ 642,391
Deferred subscriber income	19,866	13,722
Accrued expenses and allowances	15,452	15,415
Purchased intangibles	14,776	10,576
Inventory reserves	6,999	9,333
Property and Equipment	3,482	3,257
Alternative minimum tax credit and research and development credit	41	41
Valuation allowance	(328,991)	(234,771)
	530,927	459,964
Gross deferred tax liabilities:		
Deferred subscriber acquisition costs	(537,387)	(466,783)
Property and equipment	—	—
Prepaid expenses	(744)	(705)
	(538,131)	(467,488)
Net deferred tax liabilities	$ (7,204)	$ (7,524)

The long-term portion of the net deferred tax liability was approximately $7.2 million and $7.5 million at December 31, 2016 and 2015 , respectively. The current portion of the net deferred tax liability was immaterial at December 31, 2016 and 2015 , respectively.

The Company had net operating loss carryforwards as follows (in thousands):

	December 31, 2016	December 31, 2015
Net operating loss carryforwards:		
United States	$ 2,084,897	$ 1,695,386
State	1,553,812	1,338,742
Canada	33,526	28,629
New Zealand	—	5,518

U.S. and state net operating loss carryforwards will begin to expire in 2026 , if not used. Included in both the U.S. and state net operating loss carryforwards are approximately $11.5 million at December 31, 2016 and 2015 , respectively of net operating loss carryforwards for which a benefit will be recorded in Additional Paid in Capital when realized. The Company had United States research and development credits of approximately $41,000 at December 31, 2016 , and December 31, 2015 , which begin to expire in 2030 .

Canadian net operating loss carryforwards will begin to expire in 2029 .

Realization of the Company’s net operating loss carryforwards and tax credits is dependent on generating sufficient taxable income prior to their expiration. Although a portion of these carryforwards are subject to the provisions of Internal Revenue Code Section 382, the Company has not performed a formal study to determine the amount of the limitation. The use of the net operating loss carryforwards may have additional limitations resulting from future ownership changes or other factors under Section 382 of the Internal Revenue Code.

The Company has considered and weighed the available evidence, both positive and negative, to determine whether it is more-likely-than-not that some portion, or all, of the deferred tax assets will not be realized. Based on available information, management does not believe it is more likely than not that its deferred tax assets will be utilized. Accordingly, the Company has established a valuation allowance to the extent of and equal to the net deferred tax assets. The Company recorded a valuation allowance for U.S. deferred tax assets of approximately $329.0 million and $234.8 million at December 31, 2016 and 2015 , respectively. In addition to the change in valuation allowance from operations, the valuation allowance changes include impact of acquisition and disposition related items.

As of December 31, 2016 , the Company's income tax returns for the tax years 2013 through 2016, remain subject to examination by the Internal Revenue Service and state authorities.

NOTE 12 —STOCK-BASED COMPENSATION AND EQUITY

313 Incentive Units

The Company’s indirect parent, 313 Acquisition LLC (“313”), which is wholly owned by the Investors, has authorized the award of profits interests, representing the right to share a portion of the value appreciation on the initial capital contributions to 313 (“Incentive Units”). In March 2015, a total of 4,315,106 Incentive Units previously issued to the Company’s Chief Executive Officer and President were voluntarily relinquished. The Company recorded all unrecognized stock-based compensation associated with such Incentive Units at the time the Incentive Units were relinquished. As of December 31, 2016 , a total of 85,882,836 Incentive Units had been awarded, and were outstanding, to current and former members of senior management and a board member, of which 42,169,456 were issued to the Company’s Chief Executive Officer and President. The Incentive Units are subject to time-based and performance-based vesting conditions, with one-third subject to ratable time-based vesting over a five year period and two-thirds subject to the achievement of certain investment return thresholds by The Blackstone Group, L.P. and its affiliates (“Blackstone”). The Company has not recorded any expense related to the performance-based portion of the awards, as the achievement of the vesting condition is not yet deemed probable. The fair value of stock-based awards is measured at the grant date and is recognized as expense over the employee’s requisite service period. The grant date fair value was determined using a Monte Carlo simulation valuation approach with the following assumptions: expected volatility varies from 55% to 125% ; expected exercise term between 3.96 and 6.00 years; and risk-free rate between 0.62% and 1.18% .

A summary of the Incentive Unit activity for the years ended December 31, 2016 and 2015 is presented below:

	Incentive Units	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding, December 31, 2014	74,527,942	$ 1.03	8.19	$ 20,145,882
Granted	3,850,000	2.40		
Forfeited	(4,415,106)	1.03		
Exercised	—	—		
Outstanding, December 31, 2015	73,962,836	1.06	7.31	104,562,869
Granted	12,825,000	1.93		
Forfeited	(905,000)	1.09		
Exercised	—	—		
Outstanding, December 31, 2016	85,882,836	1.19	6.81	—
Unvested shares expected to vest after December 31, 2016	66,186,360	1.23	6.99	—
Exercisable at December 31, 2016	19,696,476	$ 1.03	6.21	$ —

As of December 31, 2016 , there was $1.8 million of unrecognized compensation expense related to outstanding Incentive Units, which will be recognized over a weighted-average period of 1.57 years . As of December 31, 2016 and 2015 , the weighted average grant date fair value of the outstanding incentive units was $0.30 and $0.38 , respectively.

Vivint Stock Appreciation Rights

The Company’s subsidiary, Vivint Group, Inc. (“Vivint Group”), has awarded Stock Appreciation Rights (“SARs”) to various levels of key employees. The purpose of the SARs is to attract and retain personnel and provide an opportunity to acquire an equity interest of Vivint Group. The SARs are subject to time-based and performance-based vesting conditions, with one-third subject to ratable time-based vesting over a five year period and two-thirds subject to the achievement of certain investment return thresholds by 313. The Company has not recorded any expense related to the performance-based portion of the awards, as the achievement of the vesting condition is not yet deemed probable. In connection with this plan, 21,993,158 SARs were outstanding as of December 31, 2016 . In addition, 53,621,891 SARs have been set aside for funding incentive compensation pools pursuant to long-term incentive plans established by the Company. On April 1, 2015, a new plan was created and all issued and outstanding Vivint, Inc. ("Vivint") SARs were re-granted and all reserved SARs were converted under the new Vivint Group plan. The Company assessed the conversion of the SARs as a modification of equity instruments. The restructuring did not change the fair value of the existing awards and as such, no incremental compensation expense was incurred as a result of the restructuring.

The fair value of the Vivint Group awards is measured at the grant date and is recognized as expense over the employee's requisite service period. The fair value is determined using a Black-Scholes option valuation model with the following assumptions: expected volatility varies from 55% to 125% , expected dividends of 0% ; expected exercise term between 6.00 and 6.47 years ; and risk-free rates between 0.61% and 1.77% . Due to the lack of historical exercise data, the Company used the simplified method in determining the estimated exercise term, for all Vivint Group awards.

A summary of the SAR activity for the years ended December 31, 2016 and 2015 is presented below:

	Stock Appreciation Rights	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding, December 31, 2014	6,696,660	$ 1.04	8.62	$ 1,734,748
Converted	3,259,934	0.70	8.62	
Granted	11,186,936	1.03		
Forfeited	(2,307,172)	0.80		
Exercised	(172,221)	0.68		
Outstanding, December 31, 2015	18,664,137	0.87	8.66	3,628,498
Granted	5,649,573	1.22		
Forfeited	(2,320,552)	0.92		
Exercised	—	—		
Outstanding, December 31, 2016	21,993,158	0.96	8.23	—
Unvested shares expected to vest after December 31, 2016	19,334,407	0.98	8.37	—
Exercisable at December 31, 2016	2,658,751	$ 0.78	7.20	$ —

As of December 31, 2016 , there was $0.9 million of unrecognized compensation expense related to outstanding Vivint awards, which will be recognized over a weighted-average period of 2.81 years . As of December 31, 2016 and 2015 , the weighted average grant date fair value of the outstanding SARs was $0.22 and $0.25 , respectively.

Wireless Stock Appreciation Rights

The Company's subsidiary, Vivint Wireless, has awarded SARs to various key employees. The purpose of the SARs is to attract and retain personnel and provide an opportunity to acquire an equity interest of Vivint Wireless. The SARs are subject to a five year time-based ratable vesting period. In connection with this plan, 17,500 SARs were outstanding as of December 31, 2016 . The Company does not intend to issue any additional Wireless SARs.

The fair value of the Vivint Wireless awards is measured at the grant date and is recognized as expense over the employee's requisite service period. The fair value is determined using a Black-Scholes option valuation model with the following assumptions: expected volatility of 65% , expected dividends of 0% ; expected exercise term between 6.00 and 6.50 years ; and risk-free rates between 1.51% and 1.77% . Due to the lack of historical exercise data, the Company used the simplified method in determining the estimated exercise term, for all Vivint Wireless awards.

A summary of the SAR activity for the year ended December 31, 2016 and 2015 is presented below:

	Stock Appreciation Rights		Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding, December 31, 2014	70,000	$	5.00	8.41	—
Granted	11,000		65.84		
Forfeited	—		—		
Exercised	—		—		
Outstanding, December 31, 2015	81,000		13.26	7.66	—
Granted	—		—		
Forfeited	(63,500)		15.54		
Exercised	—		—		
Outstanding, December 31, 2016	17,500		5.00	6.41	—
Unvested shares expected to vest after December 31, 2016	7,000		5.00	6.41	—
Exercisable, December 31, 2016	10,500	$	5.00	6.41	—

As of December 31, 2016 , there was an immaterial amount of unrecognized compensation expense related to all Vivint Wireless awards. As of December 31, 2016 and 2015 , the weighted average grant date fair value of the outstanding SARs was $2.30 and $6.02 , respectively.

Stock-based compensation expense in connection with all stock-based awards for the years ended December 31, 2016 , 2015 and 2014 is allocated as follows (in thousands):

	Year ended December 31,					
		2016		2015		2014
Operating expenses	$	68	$	71	$	63
Selling expenses		(127)		578		185
General and administrative expenses		3,927		2,472		1,688
Total stock-based compensation	$	3,868	$	3,121	$	1,936

Stock-based compensation expense presented in selling expenses was negative for the year ended December 31, 2016 due to a retrospective adjustment in the grant-date fair value of a series of stock-based awards. Stock-based compensation expense included in general and administrative expenses for the year ended December 31, 2016 included $2.2 million of compensation related to an equity repurchase by 313 from one of the Company's executives.

Capital Contribution

In April 2016, Parent completed the first installment of an issuance and sale to certain investors of a series of preferred stock and contributed the net proceeds from such issuance of $69.8 million to the Company as an equity contribution. In July 2016, Parent completed the final installment of the issuance and sale to certain investors of such series of preferred stock and, in August 2016, contributed the net proceeds from such issuance of $30.6 million to the Company as an equity contribution. Both issuances were private placements exempt from registration under the Securities Act.

NOTE 13 —COMMITMENTS AND CONTINGENCIES

Indemnification —Subject to certain limitations, the Company is obligated to indemnify its current and former directors, officers and employees with respect to certain litigation matters and investigations that arise in connection with their service to the Company. These obligations arise under the terms of its certificate of incorporation, its bylaws, applicable contracts, and Delaware and California law. The obligation to indemnify generally means that the Company is required to pay or reimburse the individuals' reasonable legal expenses and possibly damages and other liabilities incurred in connection with these matters.

Legal —The Company is named from time to time as a party to lawsuits arising in the ordinary course of business related to its sales, marketing, the provision of its services and equipment claims. Actions filed against the Company include commercial, intellectual property, customer, and labor and employment related claims, including complaints of alleged wrongful termination and potential class action lawsuits regarding alleged violations of federal and state wage and hour and other laws. In general, litigation can be expensive and disruptive to normal business operations. Moreover, the results of legal proceedings are difficult to predict, and the costs incurred in litigation can be substantial. The Company believes the amounts provided in its financial statements are adequate in light of the probable and estimated liabilities. Factors that the Company considers in the determination of the likelihood of a loss and the estimate of the range of that loss in respect of legal matters include the merits of a particular matter, the nature of the matter, the length of time the matter has been pending, the procedural posture of the matter, how the Company intends to defend the matter, the likelihood of settling the matter and the anticipated range of a possible settlement. Because such matters are subject to many uncertainties, the ultimate outcomes are not predictable and there can be no assurances that the actual amounts required to satisfy alleged liabilities from the matters described above will not exceed the amounts reflected in the Company’s financial statements or that the matters will not have a material adverse effect on the Company’s results of operations, financial condition or cash flows.

The Company regularly reviews outstanding legal claims and actions to determine if reserves for expected negative outcomes of such claims and actions are necessary. The Company had reserves for all such matters of approximately $2.6 million and $2.5 million as of December 31, 2016 and 2015 , respectively. In conjunction with one of the settlements, the Company is obligated to pay certain future royalties, based on sales of future products.

Operating Leases —The Company leases office and warehouse space, certain equipment, towers, wireless spectrum, software and an aircraft under operating leases with related and unrelated parties expiring in various years through 2028 . The leases require the Company to pay additional rent for increases in operating expenses and real estate taxes and contain renewal options. The Company's operating lease arrangements and related terms consisted of the following (in thousands):

	Rent Expense Years ended December 31,		
	2016	2015	Lease Term
Warehouse, office space and other	$ 11,222	$ 11,632	1 - 15 years
Wireless towers, spectrum and other	4,732	3,509	1 - 10 years
Total Rent Expense	$ 15,954	$ 15,141	

Capital Leases —The Company also enters into certain capital leases with expiration dates through October 2020. On an ongoing basis, the Company enters into vehicle lease agreements under a Fleet Lease Agreement. The lease agreements are typically 36 months leases for each vehicle and the average remaining life for the fleet is 19 months as of December 31, 2016 . As of December 31, 2016 and 2015 , the capital lease obligation balance was $17.7 million and $18.8 million , respectively.

Spectrum Licenses —During the year ended December 31, 2016 , the Company entered into leasing agreements with a third party for designated radio frequency spectrum in 40 mid-sized metropolitan markets. The initial lease term is for seven years, with an option to obtain title of the applicable spectrum licenses at the end of the initial term for a nominal fee. While licenses are issued for only a fixed time, such licenses are subject to renewal by the Federal Communications Commission (FCC). The Company intends to renew the licenses at the end of the initial term. License renewals within the industry have occurred routinely and at nominal cost. Moreover, the Company has determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful life of the licenses. As a result, the Company treats these Spectrum licenses as an indefinite-lived intangible asset.

As of December 31, 2016 , future minimum lease payments were as follows (in thousands):

	Operating	Capital	Total
2017	$ 17,452	$ 10,513	$ 27,965
2018	15,322	6,117	21,439
2019	14,998	2,049	17,047
2020	13,521	17	13,538
2021	13,086	—	13,086
Thereafter	47,634	—	47,634
Amounts representing interest	—	(963)	(963)
Total lease payments	$ 122,013	$ 17,733	$ 139,746

Build-to-Suit Lease Arrangements —In June 2016, the Company entered into a non-cancellable lease, whereby the Company will occupy a new building being constructed in Logan, UT as a location to further sales recruitment and training, as well as research and development. Because of its involvement in certain aspects of the construction per the terms of the lease, the Company is deemed the owner of the building for accounting purposes during the construction period. Accordingly, as of December 31, 2016 , the Company recorded a build-to-suit lease asset of $5.0 million included in property and equipment, net, and a corresponding $4.6 million build-to-suit lease liability included in other long-term obligations and building costs paid by the Company of $0.4 million . Construction on the new building is expected to be completed during the first quarter of 2017.

In addition to the commitments mentioned above, the Company had other off-balance sheet obligations of $61.4 million as of December 31, 2016 that consisted of commitments related to software licenses, marketing activities, and other goods and services.

NOTE 14 —RELATED PARTY TRANSACTIONS

Transactions with Vivint Solar

The Company and Vivint Solar, Inc. (“Solar”) have entered into agreements under which the Company subleased corporate office space through October 2014, and provides certain other ongoing administrative services to Solar. During the year ended December 31, 2016 , 2015 and 2014 the Company charged $4.6 million , $7.1 million and $8.5 million , respectively of general and administrative expenses to Solar in connection with these agreements. The balance due from Solar in connection with these agreements and other expenses paid on Solar’s behalf was $0.2 million and $1.9 million at December 31, 2016 and December 31, 2015 , respectively, and is included in prepaid expenses and other current assets in the accompanying consolidated balance sheets.

On December 27, 2012, the Company executed a Subordinated Note and Loan Agreement with Solar. The terms of the agreement stated that Solar may borrow up to $20.0 million , bearing interest on the outstanding balance at an annual rate of 7.5% , which interest was due and payable semi-annually on June 1 and December 1 of each year commencing on June 1, 2013 . On October 10, 2014, in connection with the completion of its initial public offering, Solar repaid loans to APX, the Company’s wholly-owned subsidiary, and to the Company’s parent entity. The Company’s parent entity, in turn, returned a portion of such proceeds to APX as a capital contribution. These transactions resulted in the receipt by APX of an aggregate amount of $55.0 million . These variable interests represent the Company’s maximum exposure to loss from direct involvement with Solar.

Also in connection with Solar’s initial public offering, the Company entered into a number of agreements with Solar related to services and other support that it has provided and will provide to Solar including:

- A Master Intercompany Framework Agreement which establishes a framework for the ongoing relationship between the Company and Solar and contains master terms regarding the protection of each other’s confidential information, and master procedural terms, such as notice procedures, restrictions on assignment, interpretive provisions, governing law and dispute resolution;
- A Non-Competition Agreement in which the Company and Solar each define their current areas of business and their competitors, and agree not to directly or indirectly engage in the other’s business for three years;
- A Transition Services Agreement pursuant to which the Company will provide to Solar various enterprise services, including services relating to information technology and infrastructure, human resources and employee benefits, administration services and facilities-related services;
- A Product Development and Supply Agreement pursuant to which one of Solar’s wholly owned subsidiaries will, for an initial term of three years, subject to automatic renewal for successive one -year periods unless either party elects otherwise, collaborate with the Company to develop certain monitoring and communications equipment that

will be compatible with other equipment used in Solar's energy systems and will replace equipment Solar currently procures from third parties;

- A Marketing and Customer Relations Agreement which governs various cross-marketing initiatives between the Company and Solar, in particularly the provision of sales leads from each company to the other; and
- A Trademark License Agreement pursuant to which the licensor, a special purpose subsidiary majority-owned by the Company and minority-owned by Solar, will grant Solar a royalty-free exclusive license to the trademark "VIVINT SOLAR" in the field of selling renewable energy or energy storage products and services.

In November 2016, the Company amended the Marketing and Customer Relations Agreement with Solar to update certain terms and conditions governing existing cross-marketing initiatives and to implement new cross-marketing initiatives including a three -month pilot program with the purpose of exploring potential opportunities for each company to offer, sell and integrate the other company's respective products and services with its standard product offering.

Other Related-party Transactions

On September 3, 2014, APX paid a dividend in the amount of $50.0 million to Holdings, its sole stockholder, which in turn paid a dividend in the amount of $50.0 million to its stockholders.

The Company incurred additional expenses during the years ended December 31, 2016 , 2015 and 2014 of approximately $4.2 million , $2.5 million , $3.1 million , respectively, for other related-party transactions including contributions to the charitable organization Vivint Gives Back, legal fees, and other services. Accrued expenses and other current liabilities at December 31, 2016 and 2015 included payables of $2.5 million and $1.7 million , respectively.

On November 16, 2012, the Company was acquired by an investor group comprised of certain investment funds affiliated with Blackstone Capital Partners VI L.P., and certain co-investors and management investors through certain mergers and related reorganization transactions (collectively, the "Merger"). At the time of the Merger, a portion of the purchase price was placed in escrow to cover potential adjustments to the total purchase consideration associated with certain indemnities and adjustments to tangible net worth. In April 2015, the parties to the Merger reached an agreement regarding the amount to be paid from escrow. As the Company had previously recorded expenses related to these pre-merger costs, this agreement resulted in a reduction to general and administrative expenses of $12.2 million , with the offset to additional paid-in capital.

In connection with the Merger, the Company entered into a support and services agreement with Blackstone Management Partners L.L.C. ("BMP"), an affiliate of Blackstone. Under the support and services agreement, the Company paid BMP, at the closing of the Merger, a transaction fee of approximately $20 million as consideration for BMP's performance of due diligence investigations, financial and structural analysis, providing corporate strategy and other advice and negotiation assistance in connection with the Merger. In addition, the Company engaged BMP to provide monitoring, advisory and consulting services on an ongoing basis. In consideration for these services, the Company agreed to pay an annual monitoring fee equal to the greater of (i) a minimum base fee of $2.7 million subject to adjustments if the Company engages in a business combination or disposition that is deemed significant and (ii) the amount of the monitoring fee paid in respect of the immediately preceding fiscal year, without regard to any post-fiscal year "true-up" adjustments as determined by the agreement. The Company incurred expenses of approximately $3.7 million , $3.6 million and 3.2 million during the years ended December 31, 2016 , 2015 and 2014 , respectively, in connection with this agreement.

Under the support and services agreement, the Company also engaged BMP to arrange for Blackstone's portfolio operations group to provide support services customarily provided by Blackstone's portfolio operations group to Blackstone's private equity portfolio companies of a type and amount determined by such portfolio services group to be warranted and appropriate. BMP will invoice the Company for such services based on the time spent by the relevant personnel providing such services during the applicable period but in no event shall the Company be obligated to pay more than $1.5 million during any calendar year. During the years ended December 31, 2016 , 2015 and 2014 the Company incurred no costs associated with such services.

Blackstone Advisory Partners L.P. ("BAP"), an affiliate of Blackstone, participated as one of the initial purchasers of the 2020 notes in each of the May 2013, December 2013 and July 2014 offerings and received fees at the time of closing of such issuances aggregating approximately $0.6 million .

BAP participated as one of the initial purchasers of the 2022 notes in each of the May 2016 and August 2016 offerings and received fees at the time of closing of such issuances aggregating approximately $0.5 million .

On May 2, 2016, the Company and David Bywater, its former Chief Operating Officer, agreed that in connection with the appointment of Mr. Bywater as interim Chief Executive Officer of Vivint Solar, Inc., Mr. Bywater would take a leave of absence from the Company. On December 15, 2016, the Board of Directors (the "Board") of the Company appointed Scott Hardy to serve as the Company's Chief Operating Officer effective December 15, 2016. Mr. Hardy will succeed David Bywater, who notified the Company on December 15, 2016 of his intent to resign as the Company's Chief Operating Officer.

In April 2016, Parent completed the first installment of an issuance and sale to certain investors of a series of preferred stock and contributed the net proceeds from such issuance of $69.8 million to the Company as an equity contribution. In July 2016, Parent completed the final installment of the issuance and sale to certain investors of such series of preferred stock and, in August 2016, contributed the net proceeds from such issuance of $30.6 million to the Company as an equity contribution. Both issuances were private placements exempt from registration under the Securities Act.

The company incurred stock-based compensation expense of $2.2 million included in general and administrative expenses for the year ended December 31, 2016 related to an equity repurchase by 313 from one of the Company's executives.

Long-term investments and other assets, includes amounts due for non-interest bearing advances made to employees that are expected to be repaid in excess of one year . Amounts due from employees as of both December 31, 2016 and 2015 , amounted to approximately $0.3 million . As of December 31, 2016 and 2015 , this amount was fully reserved.

Prepaid expenses and other current assets at December 31, 2016 and 2015 included a receivable for $0.4 million and $0.2 million , respectively, from certain members of management in regards to their personal use of the corporate jet.

From time to time, the Company does business with a number of other companies affiliated with Blackstone.

Transactions involving related parties cannot be presumed to be carried out at an arm's-length basis.

NOTE 15 —SEGMENT REPORTING AND BUSINESS CONCENTRATIONS

For the years ended December 31, 2016 and 2015 , the Company conducted business through one operating segment, Vivint. Historically, the Company primarily operated in three geographic regions: United States, Canada and New Zealand. During the year ended December 31, 2016 , the Company completed the 2016 Contract Sales and ceased operations in New Zealand. Historically, the Company's operations in New Zealand were considered immaterial and reported in conjunction with the United States. Revenues and long-lived assets by geographic region were as follows (in thousands):

	United States	Canada	Total
As of and for the			
Year ended December 31, 2016			
Revenue from external customers	$ 700,471	$ 57,436	$ 757,907
Property and equipment, net	62,781	845	63,626
Year ended December 31, 2015			
Revenue from external customers	$ 602,418	$ 51,303	$ 653,721
Property and equipment, net	55,103	171	55,274
Year ended December 31, 2014			
Revenue from external customers	$ 529,521	$ 34,156	$ 563,677
Property and equipment, net	62,368	422	62,790

NOTE 16 —EMPLOYEE BENEFIT PLAN

The Company offers eligible employees the opportunity to defer a percentage of their earned income into company-sponsored 401(k) plans. No matching contributions were made to the plans for the years ended December 31, 2016 and 2015 .

NOTE 17 —GUARANTOR AND NON-GUARANTOR SUPPLEMENTAL FINANCIAL INFORMATION

The 2019 notes, 2020 notes, 2022 private placement notes and the 2022 notes were issued by APX. The 2019 notes, 2020 notes, 2022 private placement notes and the 2022 notes are fully and unconditionally guaranteed, jointly and severally by Holdings and each of APX's existing and future material wholly-owned U.S. restricted subsidiaries. APX's existing and future foreign subsidiaries are not expected to guarantee the notes.

Presented below is the consolidating financial information of APX, subsidiaries of APX that are guarantors (the "Guarantor Subsidiaries"), and APX's subsidiaries that are not guarantors (the "Non-Guarantor Subsidiaries") as of and for the years ended December 31, 2016 , 2015 and 2014 . The audited consolidating financial information reflects the investments of APX in the Guarantor Subsidiaries and the Non-Guarantor Subsidiaries using the equity method of accounting.

Condensed Consolidating Balance Sheet
December 31, 2016
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Assets						
Current assets	$ —	$ 25,136	$ 143,954	$ 3,730	$ (67,799)	$ 105,021
Property and equipment, net	—	—	62,781	845	—	63,626
Subscriber acquisition costs, net	—	—	974,975	77,459	—	1,052,434
Deferred financing costs, net	—	4,420	—	—	—	4,420
Investment in subsidiaries	—	2,228,903	—	—	(2,228,903)	—
Intercompany receivable	—	—	9,492	—	(9,492)	—
Intangible assets, net	—	—	443,189	32,203	—	475,392
Goodwill	—	—	809,678	25,555	—	835,233
Long-term investments and other assets	—	106	11,523	13	(106)	11,536
Total Assets	$ —	$ 2,258,565	$ 2,455,592	$ 139,805	$ (2,306,300)	$ 2,547,662
Liabilities and Stockholders' (Deficit) Equity						
Current liabilities	$ —	$ 17,047	$ 160,956	$ 74,987	$ (67,799)	$ 185,191
Intercompany payable	—	—	—	9,492	(9,492)	—
Notes payable and revolving line of credit, net of current portion	—	2,486,700	—	—	—	2,486,700
Capital lease obligations, net of current portion	—	—	7,368	567	—	7,935
Deferred revenue, net of current portion	—	—	53,991	4,743	—	58,734
Accumulated losses of investee	245,182				(245,182)	—
Other long-term obligations	—	—	47,080	—	—	47,080
Deferred income tax liability	—	—	106	7,204	(106)	7,204
Total (deficit) equity	(245,182)	(245,182)	2,186,091	42,812	(1,983,721)	(245,182)
Total liabilities and stockholders' (deficit) equity	$ —	$ 2,258,565	$ 2,455,592	$ 139,805	$ (2,306,300)	$ 2,547,662

Condensed Consolidating Balance Sheet
December 31, 2015
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Assets						
Current assets	$ —	$ 2,537	$ 91,555	$ 6,540	$ (53,066)	$ 47,566
Property and equipment, net	—	—	55,012	262	—	55,274
Subscriber acquisition costs, net	—	—	728,547	62,097	—	790,644
Deferred financing costs, net	—	6,456	—	—	—	6,456
Investment in subsidiaries	—	2,070,404	—	—	(2,070,404)	—
Intercompany receivable	—	—	22,398	—	(22,398)	—
Intangible assets, net	—	—	519,301	39,094	—	558,395
Goodwill	—	—	809,678	24,738	—	834,416
Long-term investments and other assets	—	106	10,880	13	(106)	10,893
Total Assets	$ —	$ 2,079,503	$ 2,237,371	$ 132,744	$ (2,145,974)	$ 2,303,644
Liabilities and Stockholders' (Deficit) Equity						
Current liabilities	$ —	$ 18,384	$ 143,896	$ 59,304	$ (53,066)	$ 168,518
Intercompany payable	—	—	—	22,398	(22,398)	—
Notes payable and revolving line of credit, net of current portion	—	2,138,112	—	—	—	2,138,112
Capital lease obligations, net of current portion	—	—	11,169	2	—	11,171
Deferred revenue, net of current portion	—	—	40,960	3,822	—	44,782
Accumulated losses of investee	76,993	—	—	—	(76,993)	—
Other long-term obligations	—	—	10,530	—	—	10,530
Deferred income tax liability	—	—	106	7,524	(106)	7,524
Total (deficit) equity	(76,993)	(76,993)	2,030,710	39,694	(1,993,411)	(76,993)
Total liabilities and stockholders' (deficit) equity	$ —	$ 2,079,503	$ 2,237,371	$ 132,744	$ (2,145,974)	$ 2,303,644

Condensed Consolidating Statements of Operations and Comprehensive Loss
For the Year ended December 31, 2016
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Revenues	$ —	$ —	$ 715,072	$ 45,539	$ (2,704)	$ 757,907
Costs and expenses	—	—	787,138	44,575	(2,704)	829,009
(Loss) income from operations	—	—	(72,066)	964	—	(71,102)
Loss from subsidiaries	(275,957)	(69,637)	—	—	345,594	—
Other expense (income), net	—	206,320	(1,207)	(325)	—	204,788
(Loss) income before income tax expenses	(275,957)	(275,957)	(70,859)	1,289	345,594	(275,890)
Income tax expense (benefit)	—	—	545	(478)	—	67
Net (loss) income	$ (275,957)	$ (275,957)	$ (71,404)	$ 1,767	$ 345,594	$ (275,957)
Other comprehensive (loss) income, net of tax effects:						
Foreign currency translation adjustment	—	2,482	—	2,482	(2,482)	2,482
Unrealized gain on marketable securities	—	1,011	1,011	—	(1,011)	1,011
Comprehensive (loss) income	$ (275,957)	$ (272,464)	$ (70,393)	$ 4,249	$ 342,101	$ (272,464)

Condensed Consolidating Statements of Operations and Comprehensive Loss
For the Year ended December 31, 2015
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Revenues	$ —	$ —	$ 622,507	$ 34,022	$ (2,808)	$ 653,721
Costs and expenses	—	—	730,322	34,882	(2,808)	762,396
Loss from operations	—	—	(107,815)	(860)	—	(108,675)
Loss from subsidiaries	(279,107)	(118,885)	—	—	397,992	—
Other expense, net	—	160,222	9,763	96	—	170,081
Loss before income tax expenses	(279,107)	(279,107)	(117,578)	(956)	397,992	(278,756)
Income tax expense (benefit)	—	—	392	(41)	—	351
Net loss	$ (279,107)	$ (279,107)	$ (117,970)	$ (915)	$ 397,992	$ (279,107)
Other comprehensive (loss) income, net of tax effects:						
Foreign currency translation adjustment	—	(13,293)	2	(13,294)	13,292	(13,293)
Comprehensive loss	$ (279,107)	$ (292,400)	$ (117,968)	$ (14,209)	$ 411,284	$ (292,400)

Condensed Consolidating Statements of Operations and Comprehensive Loss
For the Year ended December 31, 2014
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Revenues	$ —	$ —	$ 530,888	$ 35,911	$ (3,122)	$ 563,677
Costs and expenses	—	—	623,124	37,544	(3,122)	657,546
(Loss) income from operations	—	—	(92,236)	(1,633)	—	(93,869)
(Loss) income from subsidiaries	(238,660)	(93,850)	—	—	332,510	—
Other expense (income), net	—	145,917	(1,676)	36	—	144,277
Loss from operations before income tax expense	(238,660)	(239,767)	(90,560)	(1,669)	332,510	(238,146)
Income tax (benefit) expense	—	(1,107)	779	842	—	514
Net loss	$ (238,660)	$ (238,660)	$ (91,339)	$ (2,511)	$ 332,510	$ (238,660)
Other comprehensive loss, net of tax effects:						
Foreign currency translation adjustment	—	(11,333)	(6,895)	(4,438)	11,333	(11,333)
Comprehensive loss	$ (238,660)	$ (249,993)	$ (98,234)	$ (6,949)	$ 343,843	$ (249,993)

Condensed Consolidating Statements of Cash Flows
For the Year ended December 31, 2016
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash flows from operating activities:						
Net cash (used in) provided by operating activities	$ —	$ —	$ (380,508)	$ 14,802	$ —	$ (365,706)
Cash flows from investing activities:						
Subscriber acquisition costs – company owned equipment	—	—	(5,243)	—	—	(5,243)
Capital expenditures	—	—	(11,642)	—	—	(11,642)
Proceeds from sale of capital assets	—	—	3,080	43	—	3,123
Investment in subsidiary	(100,407)	(408,214)	—	—	508,621	—
Acquisition of intangible assets	—	—	(1,385)	—	—	(1,385)
Net cash (used in) provided by investing activities	(100,407)	(408,214)	(15,190)	43	508,621	(15,147)
Cash flows from financing activities:						
Proceeds from notes payable	—	604,000	—	—	—	604,000
Repayment on notes payable	—	(235,535)	—	—	—	(235,535)
Borrowings from revolving line of credit	—	57,000	—	—	—	57,000
Repayment of revolving line of credit	—	(77,000)	—	—	—	$ (77,000)
Proceeds from capital contribution	100,407	100,407	—	—	(100,407)	100,407
Payment of intercompany settlement	—	—	3,000	(3,000)	—	—
Intercompany receivable	—	—	12,906	—	(12,906)	—
Intercompany payable	—	—	408,214	(12,906)	(395,308)	—
Repayments of capital lease obligations	—	—	(8,295)	(20)	—	(8,315)
Financing costs	—	(9,036)	—	—	—	(9,036)
Deferred financing costs	—	(9,241)	—	—	—	(9,241)
Net cash provided by (used in) provided by financing activities	100,407	430,595	415,825	(15,926)	(508,621)	422,280
Effect of exchange rate changes on cash	—	—	—	(466)	—	(466)
Net increase (decrease) in cash	—	22,381	20,127	(1,547)	—	40,961
Cash:						
Beginning of period	—	2,299	(1,941)	2,201	—	2,559
End of period	$ —	$ 24,680	$ 18,186	$ 654	$ —	$ 43,520

Condensed Consolidating Statements of Cash Flows
For the Year ended December 31, 2015
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash flows from operating activities:						
Net cash (used in) provided by operating activities	$ —	$ (1,052)	$ (267,327)	$ 13,072	$ —	$ (255,307)
Cash flows from investing activities:						
Subscriber acquisition costs – company owned equipment	—	—	(23,641)	(1,099)	—	(24,740)
Capital expenditures	—	—	(26,941)	(41)	—	(26,982)
Proceeds from sale of capital assets	—	—	480	—	—	480
Investment in subsidiary	—	(296,895)	—	—	296,895	—
Acquisition of intangible assets	—	—	(1,363)	—	—	(1,363)
Proceeds from insurance claims	—	—	2,984	—	—	2,984
Change in restricted cash	—	—	14,214	—	—	14,214
Investment in convertible note	—	—	—	—	—	—
Other assets	—	—	(208)	—	—	(208)
Net cash used in investing activities	—	(296,895)	(34,475)	(1,140)	296,895	(35,615)
Cash flows from financing activities:						
Proceeds from notes payable	—	296,250	—	—	—	296,250
Borrowings from revolving line of credit	—	271,000	—	—	—	271,000
Repayment of revolving line of credit	—	(271,000)	—	—	—	$ (271,000)
Intercompany receivable	—		11,601	—	(11,601)	—
Intercompany payable	—	—	296,895	(11,601)	(285,294)	—
Repayments of capital lease obligations	—	—	(6,402)	(12)	—	(6,414)
Deferred financing costs	—	(5,436)	—	—	—	(5,436)
Net cash provided by (used in) provided by financing activities	—	290,814	302,094	(11,613)	(296,895)	284,400
Effect of exchange rate changes on cash	—	—	—	(1,726)	—	(1,726)
Net increase (decrease) in cash	—	(7,133)	292	(1,407)	—	(8,248)
Cash:						
Beginning of period	—	9,432	(2,233)	3,608	—	10,807
End of period	$ —	$ 2,299	$ (1,941)	$ 2,201	$ —	$ 2,559

Condensed Consolidating Statements of Cash Flows
For the Year ended December 31, 2014
(In thousands)

	Parent	APX Group, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Consolidated
Cash flows from operating activities:						
Net cash provided by (used in) operating activities	$ 50,000	$ (894)	$ (318,734)	$ 9,991	$ (50,000)	$ (309,637)
Cash flows from investing activities:						
Subscriber acquisition costs – company owned equipment	—	—	(10,580)	—	—	(10,580)
Capital expenditures	—	—	(30,315)	(185)	—	(30,500)
Proceeds from sale of capital assets	—	—	964	—	—	964
Investment in subsidiary	(32,300)	(340,024)	—	—	372,324	—
Acquisition of intangible assets	—	—	(9,649)	—	—	(9,649)
Net cash used in acquisitions	—	—	(18,500)	—	—	(18,500)
Investment in marketable securities	—	(60,000)	—	—	—	(60,000)
Proceeds from marketable securities	—	60,069	—	—	—	60,069
Proceeds from note receivable	—	—	22,699	—	—	22,699
Change in restricted cash	—	—	14,375	—	—	14,375
Investment in convertible note	—	—	(3,000)	—	—	(3,000)
Other assets	—	—	(2,153)	(9)	—	(2,162)
Net cash used in investing activities	(32,300)	(339,955)	(36,159)	(194)	372,324	(36,284)
Cash flows from financing activities:						
Proceeds from notes payable	—	102,000	—	—	—	102,000
Borrowings from revolving line of credit	—	20,000	—	—	—	20,000
Proceeds from capital contribution	32,300	32,300	—	—	(32,300)	32,300
Intercompany receivable	—	—	10,658	—	(10,658)	—
Intercompany payable	—	—	340,024	(10,658)	(329,366)	—
Proceeds from contract sales	—	—	2,261	—	—	2,261
Acquisition of contracts	—	—	(2,277)	—	—	(2,277)
Repayments of capital lease obligations	—	—	(6,297)	(3)	—	(6,300)
Deferred financing costs	—	(2,927)	—	—	—	(2,927)
Payment of dividends	(50,000)	(50,000)	—	—	50,000	(50,000)
Net cash (used in) provided by financing activities	(17,700)	101,373	344,369	(10,661)	(322,324)	95,057
Effect of exchange rate changes on cash	—	—	—	(234)	—	(234)
Net increase (decrease) in cash	—	(239,476)	(10,524)	(1,098)	—	(251,098)
Cash:						
Beginning of period	—	248,908	8,291	4,706	—	261,905
End of period	$ —	$ 9,432	$ (2,233)	$ 3,608	$ —	$ 10,807

NOTE 18 —SUBSEQUENT EVENTS

Vivint Flex Pay

On January 3, 2017, the Company announced the introduction of the Vivint Flex Pay plan. Under the Vivint Flex Pay plan, the Company (i) will launch a Consumer Financing Program in the first quarter of 2017, pursuant to which it will offer to qualified customers in the United States an opportunity to finance the purchase of Products used in connection with Vivint's smart home and security services through a third party financing provider and (ii) has begun offeing retail installment contracts ("RICs") with respect to the purchase of Products to certain of the Company's customers who do not qualify to participate in the Consumer Financing Program, but qualify under Vivint's historical underwriting criteria. Vivint may also establish credit programs either directly or through an affiliate or pursuant to an agreement with a third party to provide installment loans or similar products to customers that do not qualify to participate in the Consumer Financing Program. Alternatively, customers may purchase the Products with cash or credit card.

Under the Vivint Flex Pay plan, customers pay separately for the Products and Vivint's smart home and security services. Under the Consumer Financing Program, qualified customers will be eligible for installment loans provided by a third party financing provider of up to $4,000 for either 42 or 60 months. In connection with the Consumer Financing Program, a subsidiary of the Company entered into an agreement (the "CFP Agreement") with Citizens Bank, N.A. ("Citizens") pursuant to which Citizens is the exclusive provider of installment loans under the Consumer Financing Program for Vivint's customers who are eligible for such loans. Pursuant to the CFP Agreement, Vivint pays a monthly fee to Citizens based on the average daily balance of the loans provided by Citizens outstanding and Citizens and Vivint share liability for credit losses, with Vivint being responsible for approximately 5% to 100% of lost principal balances, depending on factors specified in the CFP Agreement. The initial term of the CFP Agreement is five years, subject to automatic, one -year renewals unless terminated by either party in accordance with its terms.

2022 Notes

On February 1, 2017, APX issued an additional $300.0 million aggregate principal amount of the 2022 notes at a price of 108.250% . The Company used the net proceeds from the offering of these 2022 notes to to redeem $300.0 million aggregate principal amount of the existing 2019 notes and pay the related redemption premium, and to pay all fees and expenses related thereto and will use any remaining proceeds for general corporate purposes.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as that term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2016 , the end of the period covered by this report. Based upon that evaluation, our principal executive officer and principal financial officer concluded that, as of the end of the period covered by this report, the design and operation of our disclosure controls and procedures were effective at the reasonable assurance level.

Internal Control Over Financial Reporting

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Our internal control over financial reporting is designed to provide reasonable assurances regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Our internal control systems include the controls themselves, actions taken to correct deficiencies as identified, an organizational structure providing for division of responsibilities, careful selection and training of qualified financial personnel and a program of internal audits.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2016 . In making this assessment, management used the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013 framework).

Based on this assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2016 .

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ended December 31, 2016 that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

In the first fiscal quarter of 2017, we implemented new enterprise resource planning ("ERP") software, primarily to manage financial accounting, inventory and supply chain functions of our business. During the implementation of the ERP and throughout the remainder of the year we will evaluate and enhance our Internal Controls Over Financial Reporting to ensure appropriate coverage of process and technical risks.

ITEM 9B. OTHER INFORMATION

Iran Threat Reduction and Syria Human Rights Act of 2012

Pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) of the Exchange Act, the Company hereby incorporates by reference herein Exhibit 99.1 of this report, which includes disclosures publicly filed or provided to The Blackstone Group L.P. by Travelport Worldwide Limited and NCR Corporation, which may be considered our affiliates.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following table sets forth, as of March 2, 2016, certain information regarding our directors and executive officers who are responsible for overseeing the management of our business.

Name	Age	Position
Todd R. Pedersen	48	Chief Executive Officer and Director
Alex J. Dunn	45	President and Director
Mark J. Davies	56	Chief Financial Officer
Joy Driscoll Durling	40	Chief Information and Digital Enablement Officer
Matthew J. Eyring	47	Chief Strategy and Innovation Officer
Dale R. Gerard	46	Senior Vice President of Finance and Treasurer
Scott R. Hardy	39	Chief Operating Officer
JT Hwang	42	Chief Engineering Officer
Patrick E. Kelliher	53	Chief Accounting Officer
Shawn J. Lindquist	47	Chief Legal Officer
Jefferson H. Lyman	40	Chief Marketing Officer
Todd M. Santiago	44	Chief Revenue Officer
Jeremy B. Warren	42	Chief Technology Officer
Nathan B. Wilcox	50	Chief Compliance Officer
David F. D’Alessandro	66	Director
Paul S. Galant	49	Director
Bruce McEvoy	39	Director
Jay D. Pauley	39	Director
Joseph S. Tibbetts, Jr.	64	Director
Peter F. Wallace	41	Director

Todd R. Pedersen founded the Company in 1999 and served as our President, Chief Executive Officer and Director. In February 2013, Mr. Pedersen relinquished his title as our President and remained our Chief Executive Officer and Director. In 2011, Mr. Pedersen founded our sister company, Vivint Solar, and served as its Chief Executive Officer from August 2011 through January 2013. Mr. Pedersen currently serves as a member of Vivint Solar’s board of directors, a position he has held since November 2012. Mr. Pedersen was named the Ernst & Young Entrepreneur of the Year in 2010 in the services category for the Utah Region. Mr. Pedersen attended Brigham Young University.

Alex J. Dunn was named our President in February 2013. Prior to this, he served as our Chief Operating Officer and Director from July 2005 through January 2013. Prior to joining us, Mr. Dunn served as Deputy Chief of Staff and Chief Operating Officer to Governor Mitt Romney in Massachusetts. Before joining Governor Romney’s staff, Mr. Dunn served as entrepreneur-in-residence at the venture capital firm General Catalyst. There, he helped start m-Qube, a mobile media management company. Prior to that, he co-founded LavaStorm Technologies, an international telecommunications software company, where he served as Chief Executive Officer. Mr. Dunn is also a founder of our sister company, Vivint Solar, where he served as the Interim Chief Executive Officer from April 2013 through September 2013 and as the Chief Operating Officer from August 2011 through January 2013. Mr. Dunn currently serves on the board of directors of Vivint Solar, a position he has held since November 2012. Mr. Dunn holds a B.S. in sociology from Brigham Young University.

Mark J. Davies has served as our Chief Financial Officer since November 2013. Prior to joining us, Mr. Davies served two years as Executive Vice President of Alcoa, as President of the company’s Global Business Services unit and member of the Alcoa Executive Council. Prior to Alcoa, Mr. Davies worked at Dell Inc. for 12 years, most recently as the Managing Vice President of Strategic Programs, reporting to Chairman, Michael Dell. Prior to that, Mr. Davies served as Chief Financial Officer of the Global Consumer Group. Mr. Davies holds a B.S. in Accounting from Western Washington University and an MBA from Arizona State University.

Joy Driscoll Durling has served as our Chief Information and Digital Enablement Officer since February 27, 2017. Prior to joining us, she served in various positions at Adobe Systems Incorporated from January 2006 until February 2017, including Vice President, Adobe Cloud Platform Strategy and Operations from July 2016 to February 2017, Senior Director, Adobe

Cloud Platform Strategy and Operations from January 2015 to July 2016, and Senior Director, Office of CIO from October 2010 to January 2015, with roles that included chief of staff to the Chief Information Officer of Adobe, with a focus on enterprise architecture, portfolio management, and mergers and acquisitions, as well as running all aspects of a global, innovative enterprise IT organization. She also served as Director and Senior Manager, of Business Operations and Program Management of Adobe. Prior to Adobe, she served in various roles at Macromedia and Andersen Business Consulting focused in the high tech and software industry. Ms. Durling holds a B.S. degree in Business Administration from the University of North Carolina - Chapel Hill.

Matthew J. Eyring has served as our Chief Strategy and Innovation Officer since December 2012. Prior to joining us, Mr. Eyring was the Managing Partner of Innosight, a global strategy and innovation consulting firm. Prior to Innosight, Mr. Eyring was Vice President and General Manager at LavaStorm Technologies. Prior to that, Mr. Eyring was a Product Manager at Medtronic, Inc. Mr. Eyring holds a B.A. in economics from the University of Utah and an MBA from the Harvard Business School.

Dale R. Gerard has served as our Senior Vice President of Finance and Treasurer since September 2014. Prior to this, he served as our Vice President of Finance and Treasurer from January 2013 to September 2014. Prior to this, he served as our Treasurer from March 2010 to January 2013. Prior to joining us, Mr. Gerard was the Assistant Treasurer and Director of Finance at ACL. Before joining ACL, Mr. Gerard served as Senior Treasury Analyst at Wabash National Corporation. Prior to that, Mr. Gerard spent four years at Chemtura Corporation, formerly Great Lakes Chemical Corporation, as Finance Analyst in the Fine Chemical and Fluorine business units. Mr. Gerard holds a B.S. in Accounting and an MBA from Purdue University.

Scott R. Hardy has served as our Chief Operating Officer since December 2016. Prior to this, he served as our Senior Vice President, Inside Sales from February 2014 to December 2016. He joined Vivint as Vice President, Business Analytics in 2013. Prior to joining us, Mr. Hardy served as Principal at the Cicero Group, LP, a consulting and market research firm, from 2011 to 2013, where he led the firm's strategy consulting practice. Mr. Hardy also served in senior consulting roles at McKinsey and Company from 2006 to 2009 and Monitor Group from 2000 to 2002, where he focused on growth strategy and sales and marketing projects. From 2009 to 2011, Mr. Hardy held senior roles at Cisco, an information technology company, including Director of Cisco's Telepresence Cloud business unit and Director of Product Management, and starting in 2009 until their acquisition by Cisco in the same year, he led strategy and business development for TANDBERG, a provider of video conferencing systems. Mr. Hardy holds a B.S. in economics from Brigham Young University and an MBA from the Harvard Business School.

JT Hwang has served as our Chief Engineering Officer since February 27, 2017. Prior to this, he served as our Chief Information Officer from June 2010 to January 2013 and from August 2014 to February 2017, and he served as our Chief Technology Officer from March 2008 to June 2010 and January 2013 to August 2014. He has over 16 years of experience in the computer science field. Prior to joining us, Mr. Hwang was Chief Architect at Netezza Corporation, a global provider of data warehouse appliance solutions. He also served as Chief Architect of Hewlett-Packard's Advanced Solutions Lab. Mr. Hwang holds a B.S. of science and a Master of Engineering, Computer Science from the Massachusetts Institute of Technology.

Patrick E. Kelliher has served as our Chief Accounting Officer since February 2014. Prior to this, he served as our Vice President of Finance and Corporate Controller from March 2012 to February 2014. Prior to joining us, Mr. Kelliher served as Senior Director of Finance and Business Unit Controller of Adobe from November 2009 to March 2012. Prior to Adobe, Mr. Kelliher was the Vice President of Finance and Controller for Omniture, Inc. Before that he has served in various senior finance roles at other high growth technology companies. Mr. Kelliher holds a B.S. in Accounting and Finance from Northern Illinois University and an MBA from the University of Chicago Graduate School of Business.

Shawn J. Lindquist has served as our Chief Legal Officer since May 2016. From February 2014 to May 2016, Mr. Lindquist served as Chief Legal Officer, Executive Vice President and Secretary of Vivint Solar, Inc. From February 2010 to February 2014, Mr. Lindquist served as Chief Legal Officer, Executive Vice President and Secretary of Fusion-io, Inc. From 2005 to January 2010, Mr. Lindquist served as Chief Legal Officer, Senior Vice President and Secretary of Omniture, Inc. Prior to Omniture, Mr. Lindquist was a corporate and securities attorney at Wilson Sonsini Goodrich & Rosati, P.C. Mr. Lindquist has also served as in-house corporate and mergers and acquisitions counsel for Novell, Inc., and as Vice President and General Counsel of a privately held, venture-backed company. Mr. Lindquist has also served as an adjunct professor of law at the J. Reuben Clark Law School at Brigham Young University. Mr. Lindquist holds a B.S. in Business Management and J.D. from Brigham Young University.

Jefferson H. Lyman has served as our Chief Marketing Officer of the Company since February 2014. Prior to this, he served as our Vice President of Consumer Experience from August 2013 to February 2014. Prior to joining us, Mr. Lyman served as Senior Director for Mobile & Web Design at NIKE+, Nike's activity tracking service from November 2010 to July

2013. Mr. Lyman held other positions at NIKE, including leading digital and marketplace communication for NIKEiD (NIKE's custom footwear experience) and Nike Basketball. Mr. Lyman holds a B.S. in Nutritional Science from Brigham Young University and an MBA from the University of Oregon.

Todd M. Santiago has served as our Chief Revenue Officer since February 2013. Prior to joining us, Mr. Santiago was President of 2GIG from December 2008 to March 2013 where he coordinated the successful launch of Go!Control. Prior to joining 2GIG, Mr. Santiago was Partner and General Manager of Signature Academies in Boise, ID and VP and General Manager at NCH Corporation in Irving, TX. Mr. Santiago is the brother-in-law of Mr. Pedersen. Mr. Santiago holds a B.A. of English from Brigham Young University and an MBA from the Harvard Business School.

Jeremy B. Warren has served as our Chief Technology Officer since December 2014. Prior to this, he served as Vice President of Innovation from November 2012 to December 2014. Prior to joining us, Mr. Warren was Chief Technology Officer at 2GIG Technologies where he was responsible for the engineering and mass production of 2GIG's product line. Prior to joining 2GIG, Mr. Warren was Chief Technology Officer of the U.S. Department of Justice and Chief Architect of Lavastorm Technologies. Mr. Warren attended the Massachusetts Institute of Technology.

Nathan B. Wilcox has served as our Chief Compliance Officer since May 2016. From October 2007 to May 2016, Mr. Wilcox served as our General Counsel and Secretary. Prior to joining us, Mr. Wilcox was a shareholder at Anderson & Karrenberg, P.C., and specialized in commercial and civil litigation. With more than 22 years of experience, he has extensive experience in civil and commercial litigation. Mr. Wilcox is the past president of the Electronic Security Association and a member of the Electronic Security Association's Bylaws Committee. Mr. Wilcox holds a B.S. of Business Management from the University of Utah and a J.D. from Creighton University.

David F. D'Alessandro has served as a Director of the Company since July 31, 2013. Since 2010, Mr. D'Alessandro has served as chairman of the board of directors of SeaWorld Entertainment, Inc. Mr. D'Alessandro also serves on the boards of directors of several private companies as well as our publicly traded sister company, Vivint Solar. He served as chairman, president and chief executive officer of John Hancock Financial Services, Inc. from 2000 to 2004, having served as president and chief operating officer of the same entity from 1996 to 2000, and guided it through a merger with ManuLife Financial Corporation in 2004. Mr. D'Alessandro served as president and chief operating officer of ManuLife in 2004. He is a former partner of the Boston Red Sox. A graduate of Syracuse University, he holds honorary doctorates from three colleges and serves as vice chairman of Boston University.

Paul S. Galant has served as a Director of the Company since October 2, 2015. Mr. Galant has served as Chief Executive Officer of VeriFone Systems, Inc., and a member of VeriFone's Board of Directors since 2013. Prior to joining Verifone, Mr. Galant served as the CEO of Citigroup Inc.'s Enterprise Payments business since 2010. In this role, Mr. Galant oversaw the design, marketing and implementation of global business-to-consumer and consumer-to-business digital payments solutions. From 2009, Mr. Galant served as CEO of Citi Cards, heading Citigroup's North American and International Credit Cards business. From 2007 to 2009, Mr. Galant served as CEO of Citi Transaction Services, a division of Citi's Institutional Clients Group. From 2002 to 2007, Mr. Galant was the Global Head of the Cash Management business, one of the largest processors of payments globally. Mr. Galant joined Citigroup, a multinational financial services corporation, in 2000. Prior to joining Citigroup, Mr. Galant held positions at Donaldson, Lufkin & Jenrette, Smith Barney, and Credit Suisse. Mr. Galant holds a B.S. from Cornell University where he graduated a Phillip Merrill Scholar.

Bruce McEvoy has served as a Director of the Company since November 16, 2012. Mr. McEvoy is a Senior Managing Director at Blackstone in the Private Equity Group. Before joining Blackstone in 2006, Mr. McEvoy worked at General Atlantic from 2002 to 2004, and was a consultant at McKinsey & Company from 1999 to 2002. Mr. McEvoy currently serves on the board of directors of GCA Services Group, Inc., Performance Food Group Company, RGIS Inventory Specialists, SeaWorld Entertainment, Inc., Catalent Inc. and our publicly traded sister company, Vivint Solar. Mr. McEvoy was formerly a director of DJO Orthopedics and Vistar Corporation. Mr. McEvoy holds and A.B in History from Princeton University and an MBA from the Harvard Business School.

Jay D. Pauley has served as a Director of the Company since October 2, 2015. Mr. Pauley is a principal at Summit Partners, which he joined in 2010. Prior to joining Summit Partners, Mr. Pauley was Vice President at GTCR, a private equity firm, and an associate at Apax Partners, a private equity and venture capital firm. Before that, he worked for GE Capital. Mr. Pauley currently serves on the boards of directors of numerous private companies, including our publicly traded sister company, Vivint Solar. Mr. Pauley holds a B.S. from the Ohio State University and an MBA from the Wharton School at the University of Pennsylvania.

Joseph S. Tibbetts, Jr. has served as a Director of the Company since October 2, 2015. Mr. Tibbetts served as the senior vice president and chief financial officer for Publicis.Sapient Corporation, a publicly traded global services company from February 2015 to September 2015. Prior to that Mr. Tibbetts served as senior vice president and global chief financial officer for Sapient Corporation from October 2006 to February 2015. He began serving as Sapient Corporation's treasurer in December 2012 and was reappointed as Sapient Corporation's chief accounting officer in June 2013, a role he previously held from 2009 to 2012. In addition to being Sapient Corporation's chief financial officer, Mr. Tibbetts also served as Sapient Corporation's managing director-SapientNitro Asia Pacific, for a period of approximately 18 months ending in 2012. Prior to joining Sapient Corporation, Mr. Tibbetts was the chief financial officer of Novell, Inc. from February 2003 to June 2006 and, prior to that, he held a variety of senior financial management positions at Charles River Ventures, Lightbridge, Inc., and SeaChange International, Inc. Mr. Tibbetts was also formerly a partner with Price Waterhouse LLP. Mr. Tibbetts holds a B.S. in business administration from the University of New Hampshire. Mr. Tibbetts currently serves on the board of directors of our publicly traded sister company, Vivint Solar.

Peter F. Wallace has served as a Director of the Company since November 16, 2012. Mr. Wallace is a Senior Managing Director at Blackstone in the Private Equity Group, which he joined in 1997. Mr. Wallace serves on the board of directors of our publicly traded sister company, Vivint Solar (Chair,) as well as Michaels Stores, Inc., Outerstuff, SeaWorld Entertainment, Service King, Tradesmen International and The Weather Channel Companies. Mr. Wallace was formerly a director of AlliedBarton Security Services, Crestwood Midstream partners LP, GCA Services, New Skies Satellites Holdings Ltd. and Pelmorex Media, Inc. Mr. Wallace received a B.A. in government from Harvard College.

Corporate Governance Matters

Background and Experience of Directors

When considering whether directors have the experiences, qualifications, attributes or skills, taken as a whole, to enable the Board to satisfy its oversight responsibilities effectively in light of our business and structure, the Board focused on, among other things, each person's background and experience as reflected in the information discussed in each of the directors' individual biographies set forth above. We believe that our directors provide an appropriate mix of experience and skills relevant to the size and nature of our business. The members of the Board considered, among other things, the following important characteristics which make each director a valuable member of the Board:

- Mr. Pedersen's extensive knowledge of our industry and significant experience, as well as his insights as the original founder of our firm. Mr. Pedersen has played a critical role in our firm's successful growth since its founding and has developed a unique and unparalleled understanding of our business.
- Mr. Dunn's extensive knowledge of our industry and significant leadership experience.
- Mr. D'Alessandro's extensive business and leadership experience, including as Chairman, President and Chief Executive Officer of John Hancock Financial Services, as well as his familiarity with board responsibilities, oversight and control resulting from serving on the boards of directors of public companies.
- Mr. McEvoy's extensive knowledge of a variety of different industries and his significant financial and investment experience from his involvement in Blackstone.
- Mr. Wallace's significant financial expertise and business experience, including as a Senior Managing Director in the Private Equity Group at Blackstone, as well as his familiarity with board responsibilities, oversight and control resulting from serving on the boards of directors of public companies.
- Mr. Galant's significant business and leadership experience, including as the Chief Executive Officer of Citigroup's Enterprise Payments business, as well as his familiarity with board responsibilities, oversight and control resulting from serving on the board of directors of VeriFone Systems.
- Mr. Pauley's significant financial expertise and business experience, including as a principal at Summit Partners, as well as his familiarity with board responsibilities, oversight and control resulting from serving on the boards of directors of public companies.
- Mr. Tibbetts' significant financial expertise and business experience, including as Senior Vice President and Chief Financial Officer of Sapient Corporation and 20 years at Price Waterhouse LLP (now PricewaterhouseCoopers LLP) including his experience as an Audit Partner and National Director of the firm's Software Services Group, as well as his familiarity with board responsibilities, oversight and control resulting from serving on the boards of directors of public companies.

Independence of Directors

We are not a listed issuer whose securities are listed on a national securities exchange or in an inter-dealer quotation system which has requirements that a majority of the board of directors be independent. However, if we were a listed issuer whose securities were traded on the New York Stock Exchange and subject to such requirements, we would be entitled to rely on the controlled company exception contained in Section 303A of the NYSE Listed Company Manual from the requirements that a majority of our Board of Directors consist of independent directors, that our Board of Directors have a compensation committee that is comprised entirely of independent directors and that our Board of Directors have a Nominating Committee that is comprised entirely of independent directors. Pursuant to Section 303A of the NYSE Listed Company Manual, a company of which more than 50% of the voting power is held by an individual, a group of another company is exempt from the requirements that its board of directors consist of a majority of independent directors. At December 31, 2015, Blackstone beneficially owns greater than 50% of the voting power of the Company which would qualify the Company as a controlled company eligible for exemption under the rule.

Committees of the Board

Our Board of Directors has an Audit Committee and a Compensation Committee. Our Board of Directors may also establish from time to time any other committees that it deems necessary and advisable.

Audit Committee

Our Audit Committee consists of Messrs. McEvoy, Tibbetts and Wallace. The Audit Committee is responsible for assisting our Board of Directors with its oversight responsibilities regarding: (i) the integrity of our financial statements; (ii) our compliance with legal and regulatory requirements; (iii) our independent registered public accounting firm's qualifications and independence; and (iv) the performance of our internal audit function and independent registered public accounting firm. While our Board of Directors has not designated any of its members as an audit committee financial expert, we believe that each of the current Audit Committee members is fully qualified to address any accounting, financial reporting or audit issues that may come before it.

Compensation Committee

Our Compensation Committee consists of Messrs. D'Alessandro, McEvoy and Wallace. The Compensation Committee is responsible for determining, reviewing, approving and overseeing our executive compensation program.

Code of Ethics

We are not required to adopt a code of ethics because our securities are not listed on a national securities exchange and we do not have a code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Although we do not have a code of ethics, our other compliance procedures are sufficient to ensure that we carry out our responsibilities in accordance with applicable laws and regulations.

Compensation Committee Interlocks and Insider Participation

No member of the Compensation Committee was at any time during fiscal year 2016 , or at any other time, one of our officers or employees. We are parties to certain transactions with our Sponsor described in "Certain Relationships and Related Transactions, and Director Independence." None of our executive officers has served as a director or member of a compensation committee (or other committee serving an equivalent function) of any entity, one of whose executive officers served as a director of our Board or member of our Compensation Committee.

ITEM 11. EXECUTIVE COMPENSATION

Compensation Committee Report

The Compensation Committee has reviewed and discussed with management the following Compensation Discussion and Analysis. Based on such review and discussions, the Compensation Committee approved the inclusion of the following Compensation Discussion and Analysis in this annual report on Form 10-K for the fiscal year ended December 31, 2016 .

Submitted by the Compensation Committee:

David F. D'Alessandro, Chair

Bruce McEvoy
Peter F. Wallace

Compensation Discussion and Analysis

Introduction

Our executive compensation plan is designed to attract and retain individuals with the qualifications to manage and lead the Company as well as to motivate them to develop professionally and contribute to the achievement of our financial goals and ultimately create and grow our overall enterprise value.

Our named executive officers, or NEOs, for 2016 were:

- Todd R. Pedersen, our Chief Executive Officer;
- Mark J. Davies, our Chief Financial Officer;
- Alex J. Dunn, our President;
- Matthew J. Eyring, our Chief Strategy and Innovation Officer; and
- Todd M. Santiago, our Chief Revenue Officer.

Executive Compensation Objectives and Philosophy

Our primary executive compensation objectives are to:

- attract, retain and motivate senior management leaders who are capable of advancing our mission and strategy and ultimately, creating and maintaining our long-term equity value. Such leaders must engage in a collaborative approach and possess the ability to execute our business strategy in an industry characterized by competitiveness and growth;
- reward senior management in a manner aligned with our financial performance; and
- align senior management's interests with our equity owners' long-term interests through equity participation and ownership.

To achieve our objectives, we deliver executive compensation through a combination of the following components:

- Base salary;
- Cash bonus opportunities;
- Long-term incentive compensation;
- Broad-based employee benefits;
- Supplemental executive perquisites; and
- Severance benefits.

Base salaries, broad-based employee benefits, supplemental executive perquisites and severance benefits are designed to attract and retain senior management talent. We also use annual cash bonuses and long-term equity awards to promote performance-based pay that aligns the interests of our named executive officers with the long-term interests of our equity-owners and to enhance executive retention.

Compensation Determination Process

The compensation committee of our Board of Directors (the "Committee") is responsible for making all executive compensation determinations.

Messrs. Pedersen and Dunn generally participate in discussions and deliberations with our Committee regarding the determinations of annual cash incentive awards for our executive officers. Specifically, they make recommendations to our Committee regarding the performance targets to be used under our annual bonus plan and the amounts of annual cash incentive awards. Messrs. Pedersen and Dunn do not participate in discussions or determinations regarding their individual compensation.

Role of Compensation Consultant

In 2016, the Committee retained Frederic W. Cook & Co., Inc. (“FW Cook”) as its compensation consultant. FW Cook reports directly to the Committee. The Committee may replace FW Cook or hire additional consultants at any time. During 2016, FW Cook provided the following key services for the Committee:

- recommendations to the Committee on selection of companies for inclusion in our Compensation Peer Group (as disclosed below); and
- a competitive evaluation of total compensation for the CEO and his direct reports (including the other NEOs) versus our Compensation Peer Group and other survey data.

Use of Competitive Data

The Committee does not target a specific market percentile when making executive compensation decisions; however, it believes that information regarding compensation practices at similar companies is a useful tool to help maintain practices that accomplish our executive compensation objectives. In 2016, as noted above, the Committee engaged FW Cook to assist and make recommendations regarding the selection of companies to be included in the Compensation Peer Group. The constituents of the Compensation Peer Group represent companies operating in broadly similar or related industries that fall within a reasonable range with us in certain metrics, including revenue, EBITDA and total enterprise value. The companies included in the Compensation Peer Group are listed below:

2016 Compensation Peer Group

ADT Corporation	Garmin Ltd.	InterDigital, Inc.	Rollins, Inc.
Akamai Technologies	Harman International Industries	J2 Global Inc.	Servicemaster Global Holdings
Fitbit Inc.	IMAX Corporation	Nu Skin Enterprises	Waste Connections Inc.

In 2016, ADT Corporation was acquired by an affiliate of Apollo Global Management and therefore it will be removed from future iterations of the Compensation Peer Group. The Committee intends to periodically review the Compensation Peer Group to ensure that it remains an appropriate comparator frame for evaluating our executive compensation practices. In addition to the Compensation Peer Group data, the Committee reviewed proprietary technology company survey data, size-adjusted to our revenue. The identity of individual companies comprising the survey data is not available to or considered by the Committee or management in its evaluation process.

The Committee uses the information from both the Compensation Peer Group and the survey data as one factor to determine whether our compensation levels are competitive, and to make any necessary adjustments to reflect executive performance and our performance. As a part of this process, FW Cook measured our target pay levels for the NEOs versus the competitive data within each compensation component and in the aggregate. In order to evaluate the retentive and alignment power of their existing ownership stakes, FW Cook also prepared an analysis of the carried interest levels of our NEOs versus executives serving in similar positions at the Compensation Peer Group.

Employment Agreements

On August 7, 2014, Messrs. Pedersen and Dunn entered into employment agreements with us. These employment agreements contained the same material terms as, and superseded, those they had entered into previously with our indirect parent, 313 Acquisition LLC (“Parent”). On March 8, 2016, Messrs. Davies, Eyring and Santiago entered into employment agreements with us. A full description of the material terms of each of these employment agreements is discussed below under “Narrative Disclosure to Summary Compensation Table and 2016 Grants of Plan-Based Awards.”

Compensation Elements

The following is a discussion and analysis of each component of our executive compensation program:

Base Salary

Annual base salaries compensate our executive officers for fulfilling the requirements of their respective positions and provide them with a predictable and stable level of cash income relative to their total compensation.

Our Committee believes that the level of an executive officer’s base salary should reflect such executive’s performance, experience and breadth of responsibilities, salaries for similar positions within our industry and any other factors relevant to that particular job. The Committee, with the assistance of our Human Resources Department, also used the experience, market knowledge and insight of its members in evaluating the competitiveness of current salary levels.

In the sole discretion of our Committee, base salaries for our executive officers may be periodically adjusted to take into account changes in job responsibilities or competitive pressures.

In consideration of the above-mentioned factors and with reference to the competitive data provided by FW Cook, the Committee made the following base salary adjustments for the named executive officers, effective as of July 25, 2016:

Name	Base Salary prior to July 25, 2016 ($)	Base Salary Effective as of July 25, 2016 ($)
Todd R. Pedersen	525,000	660,000
Mark J. Davies	515,000	600,000
Alex J. Dunn	525,000	660,000
Matthew J. Eyring	515,000	600,000
Todd M. Santiago	530,450	600,000

The “Summary Compensation Table” and corresponding footnotes to the table show the base salary earned by each named executive officer during fiscal 2016 as well as the base salary adjustments for each of our named executive officers made during fiscal 2016 .

Bonuses

Cash bonus opportunities are available to various managers, directors and executives, including our named executive officers, in order to motivate their achievement of short-term performance goals and tie a portion of their cash compensation to performance.

Fiscal 2016 Management Bonus - Messrs. Pedersen and Dunn

In fiscal 2016 , Messrs. Pedersen and Dunn participated in a formalized annual cash incentive compensation plan pursuant to which they are eligible to receive an annual cash incentive award based on the achievement of company-wide performance objectives. As provided in their respective employment agreements, the target bonus amounts for each of Messrs. Pedersen and Dunn are 100% of their respective base salaries.

The actual bonus amounts to be paid to Messrs. Pedersen and Dunn for fiscal 2016 performance are calculated by multiplying each named executive officer’s bonus potential target (which is equal to 100% of his base salary at the end of the performance period) by an achievement factor based on our actual achievement relative to company-wide performance objectives.

The achievement factor was determined by calculating our actual achievement against the company-wide performance targets based on the pre-established scale set forth in the following table:

% Attainment of Performance Target	Achievement Factor
Less than 90%	0
90%	50%
100%	100%
110%	200%
130% or greater	250%

Based on the pre-established scale set forth above, no cash incentive award would be paid to Messrs. Pedersen and Dunn unless our actual performance for 2016 was at or above 90% of the performance target(s). If our actual performance was 100% of target, then Messrs. Pedersen and Dunn would be entitled to their respective bonus potential target amounts. If performance was 110% of target, then they would be eligible for a cash incentive award equal to 200% of their respective bonus potential target amounts. If performance was 130% or more of target, then they would be eligible for a maximum cash incentive equal to 250% of their respective bonus potential target amounts. For performance percentages between these levels, the resulting achievement factor would be adjusted on a linear basis. The performance target for 2016 for Messrs. Pedersen and Dunn was Adjusted EBITDA (as that term is defined elsewhere in this annual report on Form 10-K under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Covenant Compliance”) of $444,000,000 for the Company.

For fiscal 2016 , the Company's actual Adjusted EBITDA achieved was $444,098,000 , or 100% of target, which results in an achievement factor of 100% of their respective base salaries under the annual cash incentive plan. The following table illustrates the calculation of the annual cash incentive awards payable to each of Messrs. Pedersen and Dunn in light of these performance results.

Name	Salary (1) ($)	Target Bonus %	Target Bonus Amount ($)	Achievement Factor	Bonus Earned ($)
Todd R. Pedersen	660,000	100%	660,000	100%	660,000
Alex J. Dunn	660,000	100%	660,000	100%	660,000

(1) The annual base salaries of Messrs. Pedersen and Dunn were increased from $525,000 to $660,000, effective as of July 25, 2016.

Fiscal 2016 Management Bonus – Messrs. Davies, Eyring and Santiago

For fiscal 2016 , Messrs. Davies, Eyring and Santiago are eligible to receive a discretionary bonus based on a percentage of such executive’s base salary. In recognition of their contributions to our company, the Compensation Committee approved an increase to the bonus potential target for each of these executives, from 50% to 60% of the executive’s annual base salary, for fiscal 2016 . As a result, each of Messrs. Davies, Eyring and Santiago are eligible to receive a target bonus opportunity of 60% of their respective base salaries. The following table sets forth the bonus awards payable to Messrs. Davies, Eyring and Santiago, respectively, which were based on Mr. Davies’ contribution to financial management and operational improvement, Mr. Eyring’s contribution to our product innovation and strategy, and Mr. Santiago’s contribution to the success of our 2016 selling efforts:

Named Executive Officer	Salary (1) ($)	Target Bonus % (2)	Target Bonus Amount ($)	Bonus Amount Payable ($)
Mark J. Davies	600,000	60%	360,000	360,000
Matthew J. Eyring	600,000	60%	360,000	360,000
Todd M. Santiago	600,000	60%	360,000	360,000

(1) Effective July 25, 2016, the base salaries of Messrs. Davies, Eyring and Santiago were increased as follows: for Messrs. Davies and Eyring, from $515,000 to $600,000; and for Mr. Santiago, from $530,450 to $600,000.
(2) The bonus potential target for each of Messrs. Davies, Eyring and Santiago was increased from 50% to 60% for fiscal 2016.

Sign-On Bonuses

From time to time, the Committee may award sign-on bonuses in connection with the commencement of an NEO’s employment with us. Sign-on bonuses are used only when necessary to attract highly skilled individuals to the Company. Generally they are used to incentivize candidates to leave their current employers, or may be used to offset the loss of unvested compensation they may forfeit as a result of leaving their current employers.

Long-Term Incentive Compensation

Equity Awards

313 Acquisition LLC (“Parent”), an entity controlled by investment funds or vehicles affiliated with Blackstone, grants long-term equity incentive awards designed to promote our interest by providing these executives with the opportunity to

acquire equity interests as an incentive for their remaining in our service and aligning the executives' interests with those of the Company's ultimate equity holders. The long-term equity incentive awards are in the form of Class B Units in Parent.

The Class B Units are profits interests having economic characteristics similar to stock appreciation rights and represent the right to share in any increase in the equity value of Parent. Therefore, the Class B Units only have value to the extent there is an appreciation in the value of our business from and after the applicable date of grant. In addition, the vesting of two-thirds of the Class B Units is subject to Blackstone achieving minimum internal rates of return on its investment in Class A Units, as described further below.

The Class B Units granted to our named executive officers are designed to motivate them to focus on efforts that will increase the value of our equity while enhancing their retention. The specific sizes of the equity grants made are determined in light of Blackstone's practices with respect to management equity programs at other private companies in its portfolio and the executive officer's position and level of responsibility with us.

In 2016, in order to recognize their contributions to our company to date and to enhance the alignment of their interests with that of the equity owners, Messrs. Davies, Eyring and Santiago were granted 400,000 Class B Units, 850,000 Class B Units and 850,000 Class B Units, respectively.

The Class B Units are divided into a time-vesting portion (one-third of the Class B Units granted), a 2.0x exit-vesting portion (one-third of the Class B Units granted), and a 3.0x exit-vesting portion (one-third of the Class B Units granted). Unvested Class B units are not entitled to distributions from the Company. For additional information regarding our Class B Units, see "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards—Equity Awards."

The initial award of Class B Units granted to Mr. Davies in connection with the commencement of his employment in 2013 contain the following different economic terms: Mr. Davies's Class B Units will not entitle him to receive any distributions in respect of such units unless and until the cumulative value of such foregone distributions attributable to each Class B Unit equals the fair market value of a Class B Unit on the date of the grant of such Class B Unit (such foregone amount, the "Delayed Amount Per Class B Unit"). At that point, Mr. Davies (together with the other holders of Class B Units subject to similar foregone distributions) will become entitled to receive pro rata distributions of all subsequent amounts (to the exclusion of other holders who do not have similar rights) until he has received distributions per Class B Unit equal to the Delayed Amount Per Class B Unit. Thereafter, Mr. Davies will become entitled to receive the same amounts with respect to his Class B Units as other holders of Class B Units receive with respect to their Class B Units.

Another key component of our long-term equity incentive program is that at the time of the Transactions certain of our NEOs and other eligible employees were provided with the opportunity to invest in Class A Units of Parent on the same general terms as Blackstone and other co-investors. The Class A Units are equity interests, have economic characteristics that are similar to those of shares of common stock in a corporation and have no vesting schedule. We consider this investment opportunity an important part of our long-term equity incentive program because it encourages equity ownership and aligns the NEOs' financial interests with those of our ultimate equity holders. Each of Messrs. Pedersen, Dunn and Santiago, when presented with the opportunity, chose to invest in Class A Units of Parent. In 2016, Parent repurchased 3,720,019 Class A Units from Mr. Dunn.

Benefits and Perquisites

We provide to all of our employees, including our named executive officers, employee benefits that are intended to attract and retain employees while providing them with retirement and health and welfare security. Broad-based employee benefits include:

- a 401(k) savings plan;
- paid vacation, sick leave and holidays;
- medical, dental, vision and life insurance coverage; and
- employee assistance program benefits.

We do not match employee contributions to the 401(k) savings plan. At no cost to the employee, we provide an amount of basic life insurance valued at $50,000.

We also provide our named executive officers with specified perquisites and personal benefits that are not generally available to all employees, such as personal use of our Company leased aircraft, use of a company vehicle, financial advisory services, reimbursement for health insurance premiums, enhanced employee cafeteria benefits, country club memberships, excess liability insurance premiums, alarm system fees, event tickets, fuel expenses, relocation assistance and, in certain circumstances, reimbursement for personal travel. Each of Messrs. Pedersen and Dunn has also been provided with an annual fringe benefit allowance of $300,000 under the terms of their employment agreements. We also reimburse our named executive officers for taxes incurred in connection with certain of these perquisites. In addition, on January 1, 2013, we entered into time-sharing agreements with Messrs. Pedersen and Dunn, governing their personal use of the Company leased aircraft. Messrs. Pedersen and Dunn pay for personal flights an amount equal to the aggregate variable cost to the Company for such flights, up to the maximum authorized by Federal Aviation Regulations. The aggregate variable cost for this purpose includes fuel costs, out-of-town hangar costs, landing fees, airport taxes and fees, customs fees, travel expenses of the crew, any "deadhead" segments of flights to reposition corporate aircraft and other related rental fees. In addition, family members of our named executive officers have, in limited circumstances, accompanied the named executive officers on business travel on the Company leased aircraft for which we incurred *de minimis* incremental costs.

We provide these perquisites and personal benefits in order to further our goal of attracting and retaining our executive officers. These benefits and perquisites are reflected in the "All Other Compensation" column of the "Summary Compensation Table" and the accompanying footnote in accordance with the SEC rules.

Severance Arrangements

Our Board of Directors believes that providing severance benefits to our named executive officers is critical to our long-term success, because severance benefits act as a retention device that helps secure an executive's continued employment and dedication to the Company. Each of our named executive officers have severance arrangements, which are included in their employment agreements. Messrs. Pedersen and Dunn are eligible to receive severance benefits if their employment is terminated for any reason other than voluntary resignation or willful misconduct. The severance payments to our named executive officers are contingent upon the affected executive's execution of a release and waiver of claims, which contains non-compete, non-solicitation and confidentiality provisions. See "Potential Payments Upon Termination or Change in Control" for descriptions of these arrangements.

Messrs. Davies, Eyring and Santiago are eligible to receive severance benefits if their employment is terminated by us without "cause" (as defined below under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards—Employment Agreements") and other than by reason of death or while he is disabled. See "Potential Payments Upon Termination or Change in Control" for descriptions of these arrangements."

Summary Compensation Table

The following table provides summary information concerning compensation paid or accrued by us to or on behalf of our named executive officers.

Name and Principal Position	Year	Salary ($) (1)	Bonus ($) (2)	Stock Awards ($) (3)	Non-Equity Incentive Plan Compensation ($) (4)	Declined Non-Equity Incentive Plan Compensation ($) (5)	All Other Compensation ($) (6)	Total ($)
Todd R. Pedersen,	2016	582,115	—	—	660,000	—	869,823	2,111,938
Chief Executive Officer and Director	2015	525,000	—	—	525,000	—	687,561	1,737,561
	2014	500,000	—	—	332,262	(282,262)	776,538	1,326,538
Mark J. Davies,	2016	550,962	360,000	6,667	—	—	89,992	1,007,621
Chief Financial Officer	2015	511,250	755,625	—	—	—	311,534	1,578,409
	2014	500,000	734,500	398,856	—	—	47,584	1,680,940
Alex J. Dunn,	2016	582,115	—	—	660,000	—	2,926,862	4,168,977
President and Director	2015	518,750	511,784	—	518,750	—	680,060	2,229,344
	2014	500,000	276,342	—	332,262	(282,262)	742,772	1,569,114
Matthew J. Eyring,	2016	550,962	360,000	14,167	—	—	63,736	988,865
Chief Strategy and Innovation Officer	2015	534,808	257,500	—	—	—	86,836	879,144
	2014	515,000	241,535	—	—	—	53,576	810,111
Todd M. Santiago,	2016	559,875	360,000	14,167	—	—	142,412	1,076,454
Chief Sales Officer	2015	526,588	263,294	—	—	—	127,432	917,314
	2014	515,000	241,535	—	—	—	89,442	845,977

(1) Effective July 25, 2016, the base salaries of Messrs. Pedersen, Davies, Dunn, Eyring and Santiago were increased as follows: for Messrs. Pedersen and Dunn, from $525,000 to $660,000; for Messrs. Davies and Eyring, from $515,000 to $600,000; and for Mr. Santiago, from $530,450 to $600,000.

(2) The amounts reported in this column for Messrs. Davies, Eyring and Santiago for 2016 represent their annual discretionary bonuses earned with respect to fiscal 2016.

(3) Amounts included in this column for Messrs. Davies, Eyring and Santiago reflect the aggregate grant date fair value of the Class B Units granted during each of the years presented calculated in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Compensation-Stock Compensation ("FASB ASC Topic 718") and using the assumptions in Note 12 - Stock Based Compensation and Equity to the Consolidated Financial Statements in Part II, Item 8 of this report. Achievement of the performance conditions for the exit-vesting portions of the Class B Units was not deemed probable on the date of grant, and, accordingly, pursuant to the SEC's disclosure rules, no value is included in this table for those portions of the awards. The fair value at the grant date of the Class B Units granted to Mr. Davies in fiscal 2016 assuming achievement of the performance conditions was $17,333. The fair value at the grant date of the Class B Units granted to Mr. Davies in fiscal 2014 assuming achievement of the performance conditions was $975,522. The fair value at the grant date of the Class B Units granted to Messrs. Eyring and Santiago in fiscal 2016 assuming achievement of the performance conditions was $36,833. The terms of these units are summarized under "Compensation Discussion and Analysis-Compensation Elements-Long-Term Incentive Compensation" above and under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table-Equity Awards" and "Potential Payments Upon Termination or Change in Control" below.

(4) Amounts reported in this column for Messrs. Pedersen and Dunn reflect amounts earned under the annual cash incentive plan. See "Compensation Discussion and Analysis-Compensation Elements-Bonuses."

(5) Messrs. Pedersen and Dunn voluntarily declined an amount of $282,262 related to their fiscal 2014 annual cash incentive awards. See "Compensation Discussion and Analysis—Compensation Elements—Bonuses."

(6) Amounts reported under All Other Compensation for fiscal 2016 reflect the following:

(a) as to Mr. Pedersen, $300,000 additional cash compensation paid to Mr. Pedersen pursuant to his employment agreement (see "Narrative Disclosure to Summary Compensation Table and Grants of Plan Based Awards-Employment Agreements"), reimbursement for health insurance premiums, excess liability insurance premiums, country club membership fees, actual Company expenditures for use, including business use, of a Company car, alarm system fees, the value of event tickets, fuel expenses, and Company paid personal travel, $150,010 in actual Company expenditures for financial advisory services provided to Mr. Pedersen, other miscellaneous personal benefits and $263,279 reimbursed for taxes with respect to perquisites. In addition, Mr. Pedersen reimburses the Company for the aggregate variable costs associated with his personal use of the Company leased aircraft in accordance with the time-sharing agreement described under "Compensation Discussion and Analysis-Compensation Elements-Benefits and Perquisites." While maintenance costs are not included in the reimbursement amount under the time-sharing agreement, the Company has determined it is appropriate to allocate a portion of the maintenance costs when calculating the aggregate incremental cost associated with personal use of the Company aircraft for purposes of SEC disclosure. Therefore, amounts reported also reflect $91,215 in maintenance costs allocated on the basis of the proportion of personal use. In addition, family members of Mr. Pedersen have, in limited circumstances, accompanied him on business travel on the Company leased aircraft for which we incurred *de minimis* incremental costs;

(b) as to Mr. Davies, $29,500 in actual Company expenditures for use, including business use, of a Company car, reimbursement for health insurance premiums, country club membership fees, the value of event tickets, the value of meals in the Company cafeteria, excess liability insurance premiums, fuel expenses and $28,409 reimbursed for taxes owed with respect to perquisites. In addition, family members of Mr. Davies have, in limited circumstances, accompanied him on business travel on the Company leased aircraft for which we incurred de minimis incremental costs;

(c) as to Mr. Dunn, $300,000 additional cash compensation paid to Mr. Dunn pursuant to his employment agreement (see "Narrative Disclosure to Summary Compensation Table and Grants of Plan Based Awards-Employment Agreements"), reimbursement for health insurance premiums, excess liability insurance premiums, the value of meals in the Company cafeteria, country club membership fees, actual Company expenditures for use, including business use, of a Company car, alarm system fees, the value of event tickets, $150,010 in actual Company expenditures for financial advisory services provided to Mr. Dunn, other miscellaneous personal benefits and $141,837 reimbursed for taxes with respect to perquisites and $2,232,000 of stock-based compensation related to the repurchase by Parent of 3,720,019 Class A Units. In addition, Mr. Dunn reimburses the Company for the aggregate variable costs associated with his personal use of the Company leased aircraft in accordance with the time-sharing agreement described under "Compensation Discussion and Analysis-Compensation Elements-Benefits and Perquisites." As discussed in footnote 6(a) above, amounts reported reflect a similar allocation of $15,052 in maintenance costs associated with Mr. Dunn's personal use of the Company leased aircraft. In addition, family members of Mr. Dunn have, in limited circumstances, accompanied him on business travel on the Company leased aircraft for which we incurred *de minimis* incremental costs;

(d) as to Mr. Eyring, $21,060 in actual Company expenditures for use, including business use, of a Company car, reimbursement for health insurance premiums, country club membership fees, the value of event tickets, the value of meals in the Company cafeteria, excess liability insurance premiums, fuel expenses, alarm system fees and $17,730 reimbursed for taxes owed with respect to perquisites. In addition, family members of Mr. Eyring have, in limited circumstances, accompanied him on business travel on the Company leased aircraft for which we incurred *de minimis* incremental costs; and

(e) as to Mr. Santiago, $37,736 in actual Company expenditures for use, including business use, of a Company car, reimbursement for health insurance premiums, country club membership fees, the value of event tickets, the value of meals in the Company cafeteria, excess liability insurance premiums, fuel expenses and $42,598 reimbursed for taxes owed with respect to perquisites. In addition, family members of Mr. Santiago have, in limited circumstances, accompanied him on business travel on the Company leased aircraft for which we incurred *de minimis* incremental costs.

Grants of Plan-Based Awards in 2016

The following table provides supplemental information relating to grants of plan-based awards made to our named executive officers during 2016 .

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1) Threshold ($)	Target ($)	Maximum ($)	Estimated Future Payouts Under Equity Incentive Plan Awards (2) Threshold (#)	Target (#)	Maximum (#)	All Other Stock Awards: Number of Shares of Stock or Units (#) (2)	Grant Date Fair Value of Stock and Option Awards ($) (3)
Todd R. Pedersen	—	330,000	660,000	1,650,000	—	—	—	—	—
Mark J. Davies	9/20/2016	—	—	—	—	266,667	—	133,333	6,667
Alex Dunn	—	330,000	660,000	1,650,000	—	—	—	—	—
Matthew J. Eyring	9/20/2016	—	—	—	—	566,667	—	283,333	14,167
Todd M. Santiago	9/20/2016	—	—	—	—	566,667	—	283,333	14,167

(1) Reflects the possible payouts of cash incentive compensation to Messrs. Pedersen and Dunn under the fiscal 2016 management bonus. The actual amounts paid are reflected in the "Non-Equity Incentive Plan Compensation" column of the "Summary Compensation Table" and described in "Compensation Discussion and Analysis—Compensation Elements—Bonuses—Fiscal 2016 Management Bonus – Messrs. Pedersen and Dunn" above.
(2) As described in more detail in the "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards-Equity Awards" section that follows, amounts reported reflect grants of Class B Units that are divided into three tranches for vesting purposes: one third are time-vesting, one-third are 2.0x exit-vesting and one-third are 3.0x exit-vesting. All of the exit-vesting units are reported as an equity incentive plan award in the "Estimated Future Payouts Under Equity Incentive Plan Awards" column, while the time-vesting tranche of the awards are reported as an all other stock award in the "All Other Stock Awards: Number of Shares of Stock or Units" column.
(3) Amounts included in this column represent the grant date fair value of the Class B Units granted to Messrs. Davies, Eyring and Santiago calculated in accordance with FASB ASC Topic 718. The value at the grant date for the exit-vesting portions of the Class B Units is based upon the probable outcome of the performance conditions. See footnote (3) to the Summary Compensation Table.

Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards

Employment Agreements

Employment Agreements with Messrs. Pedersen and Dunn

The employment agreements with our Chief Executive Officer (CEO), Todd Pedersen, and our President, Alex Dunn, contain substantially similar terms. The principal terms of each of these agreements are summarized below, except with respect to potential payments and other benefits upon specified terminations, which are summarized below under "Potential Payments Upon Termination or Change in Control."

Each employment agreement was entered into on August 7, 2014, provides for a term ending on November 16, 2017 and extends automatically for additional one-year periods unless either party elects not to extend the term. Under the employment agreements, each executive is eligible to receive a minimum base salary, specified below, and an annual bonus based on the achievement of specified financial goals for fiscal years 2013 and beyond. If these goals are achieved, the executive may receive an annual incentive cash bonus equal to a percentage of his base salary as provided below.

Mr. Pedersen's employment agreement provides that he is to serve as CEO and is eligible to receive a base salary originally set at $500,000, subject to periodic adjustments as may be approved by our Board of Directors. Effective January 1, 2015, Mr. Pedersen's base salary was increased from $500,000 to $525,000, and effective July 25, 2016, his base salary was increased from $525,000 to $660,000. Mr. Pedersen is also eligible to receive a target bonus of 100% of his annual base salary at the end of the fiscal year if targets established by the Board of Directors are achieved.

Mr. Dunn's employment agreement provides that he is to serve as President and is eligible to receive a base salary originally set at $500,000, subject to periodic adjustments as may be approved by our Board of Directors. Effective January 1, 2015, Mr. Dunn's base salary was increased from $500,000 to $525,000, and effective July 25, 2016, his base salary was increased from $525,000 to $660,000. Mr. Dunn is also eligible to receive a target bonus of 100% of his annual base salary at the end of the fiscal year if targets established by the Board of Directors are achieved.

The employment agreements contain the method for determining the bonus of Messrs. Pedersen and Dunn for any given year. The agreements provide that the calculation of any bonus will be determined based on the achievement of performance objectives, with targets for "threshold," "target," and "high" achievement of the specified objectives as further described under "Compensation Discussion and Analysis-Compensation Elements-Bonuses."

In addition, each employment agreement provides for the following:

- Reasonable personal use of the company airplane, subject to reimbursement by the executive of an amount determined on a basis consistent with IRS guidelines;
- An annual payment equal to $300,000 per year, subject to all applicable taxes and withholdings, intended to be used to reimburse the Company for the costs of the executive's personal use of the company airplane; and
- Access to a financial advisor to provide the executive with customary financial advice, subject to a combined aggregate cap of $250,000 on such professional fees for Messrs. Pedersen and Dunn.

Each executive officer is also entitled to participate in all employee benefit plans, programs and arrangements made available to other executive officers generally.

Each of the employment agreements also contains restrictive covenants, including an indefinite covenant on confidentiality of information, and covenants related to non-competition and non-solicitation of our employees and customers and affiliates at all times during employment, and for two years after any termination of employment. These covenants are substantially the same as the covenants Messrs. Pedersen and Dunn agreed to in connection with their receipt of Class B Units summarized below under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards—Equity Awards—Restrictive Covenants."

Employment Agreements with Messrs. Davies, Eyring and Santiago

On March 8, 2016, we entered into employment agreements with certain of our officers, including Messrs. Davies, Eyring and Santiago. The employment agreements with Messrs. Davies, Eyring and Santiago contain substantially similar terms. The principal terms of each of these agreements are summarized below.

The employment agreement with each of these named executive officers provides for a term ending on March 8, 2019, which extends automatically for additional one-year periods unless either party elects not to extend the term. Under the employment agreements, each executive is eligible to receive a minimum base salary, and an annual bonus award with a target amount equal to a percentage of his base salary. The current annual base salary of each of Messrs. Davies, Eyring and Santiago is $600,000, and each of them is eligible to earn an annual bonus award with a target amount equal to 60% of their base salary at the end of the performance period. If the employment of Messrs. Davies, Eyring or Santiago terminates for any reason, the executive is entitled to receive: (1) any base salary accrued through the date of termination; (2) reimbursement of any unreimbursed business expenses properly incurred by the executive; and (3) such employee benefits, if any, as to which the executive may be entitled under the Company's employee benefit plans (the payments and benefits described in (1) through (3) being "accrued rights").

If the employment of Messrs. Davies, Eyring or Santiago is terminated by us without "cause" (as defined below) and other than by reason of death or while he is disabled (any such termination, a "qualifying termination"), such executive is entitled to the accrued rights and, conditioned upon execution and non-revocation of a release and waiver of claims in favor of the Company and its affiliates, and continued compliance with the non-compete, non-solicitation, non-disparagement, and confidentiality provisions set forth in the employment agreements:

- a pro rata portion of his target annual bonus based upon the portion of the fiscal year during which the executive was employed (the "pro rata bonus");
- a lump-sum cash payment equal to 150% of the executive's then-current base salary plus 150% of the actual bonus the executive received in respect of the immediately preceding fiscal year (or, if a termination of employment occurs prior to any annual bonus becoming payable under his employment agreement, the target bonus for the immediately preceding fiscal year); and

- a lump-sum cash payment equal to the cost of the health and welfare benefits for the executive and his dependents, at the levels at which the executive received benefits on the date of termination, for 18 months (the "COBRA payment").

For purposes of their respective employment agreements, the term "cause" means the executive's continued failure to substantially perform his employment duties for a period of 10 days following written notice from the Company; any dishonesty in the performance of the executive's employment duties that is materially injurious to the Company; act(s) on the executive's part constituting either a felony or a misdemeanor involving moral turpitude; the executive's willful malfeasance or misconduct in connection with his employment duties that causes substantial injury to us; or the executive's material breach of the restrictive covenants set forth in the employment agreements. Each of the foregoing events is subject to specified notice and cure periods.

In the event of the executive's termination of employment due to death or disability, he will only be entitled to the accrued rights, the pro rata bonus payment, and the COBRA payment.

Each executive officer is also entitled to participate in all employee benefit plans, programs and arrangements made available to other executive officers generally.

Each of the employment agreements also contains restrictive covenants, including an indefinite covenant on confidentiality of information, and covenants related to non-competition and non-solicitation of the Company's employees and customers and affiliates at all times during employment, and for 18 months after any termination of employment.

Equity Awards

As a condition to receiving his Class B Units, each named executive officer was required to enter into a subscription agreement with us and Parent and to become a party to the limited liability company agreement of Parent as well as a securityholders agreement. These agreements generally govern the named executive officer's rights with respect to the Class B units and contain certain rights and obligations of the parties thereto with respect to vesting, governance, distributions, indemnification, voting, transfer restrictions and rights, including put and call rights, tag-along rights, drag-along rights, registration rights and rights of first refusal, and certain other matters.

Vesting Terms

Only vested Class B units are entitled to distributions. The Class B units are divided into a time-vesting portion (1/3 of the Class B Units granted), a 2.0x exit-vesting portion (1/3 of the Class B Units granted), and a 3.0x exit-vesting portion (1/3 of the Class B Units granted).

- Time-Vesting Units: Twelve months after the initial "vesting reference date," as defined in the applicable subscription agreement, 20% of the named executive officer's time-vesting Employee Units will vest, subject to continued employment through such date. The "vesting reference date" for Messrs. Pedersen and Dunn is November 16, 2012, the date of the grant of their Class B Units. The "vesting reference" date for the Class B Units granted to Messrs. Eyring and Santiago on August 12, 2013 is also November 16, 2012 and the "vesting reference date" for the Class B Units granted to Mr. Davies is November 4, 2013, which is the date he commenced employment with us. Thereafter, an additional 20% of the named executive officer's time-vesting Class B Units will vest every year until he is fully vested, subject to his continued employment through each vesting date. Notwithstanding the foregoing, the time-vesting Class B Units will become fully vested upon a change of control (as defined in the securityholders agreement) that occurs while the named executive officer is still employed by us. In addition, as to Messrs. Pedersen and Dunn, the time-vesting Class B Units will also continue to vest for one year following a termination by Parent without "cause" (excluding by reason of death or disability) or resignation by the executive for "good reason," each as defined in the executive's employment agreement (any such termination, a "qualifying termination").
- 2.0x Exit-Vesting Units: The 2.0x exit-vesting Class B Units vest if the named executive officer is employed by us when and if Blackstone receives cash proceeds in respect of its Class A units in the Company equal to (x) a return equal to 2.0x Blackstone's cumulative invested capital in respect of the Class A Units and (y) an annual internal rate of return of at least 20% on Blackstone's cumulative invested capital in respect of its Class A Units. In addition, (i) as to Messrs. Pedersen and Dunn, the 2.0x exit-vesting Class B Units will remain eligible to vest for one year following a qualifying termination if a change of control occurs during such one-year period and, as a result of such change of control, the 2.0x exit-vesting conditions are met.

- 3.0 Exit-Vesting Units: The 3.0x exit-vesting Class B Units vest if the named executive officer is employed by us when and if Blackstone receives cash proceeds in respect of its Class A units in the Company equal to (x) a return equal to 3.0x Blackstone's cumulative invested capital in respect of the Class A Units and (y) an annual internal rate of return of at least 25% on Blackstone's cumulative invested capital in respect of its Class A Units. In addition, as to Messrs. Pedersen and Dunn, the 3.0x exit-vesting Class B Units will remain eligible to vest for one year following a qualifying termination if a change of control occurs during such one-year period and, as a result of such change of control, the 3.0x exit-vesting conditions are met.

In addition, on March 8, 2016, Parent amended the subscription agreements relating to the Class B Units held by each of Messrs. Davies, Eyring and Santiago to provide that if the executive is terminated by us without "cause" (as defined for the purposes of the employment agreement) and other than by reason of death or while he is disabled, his 2.0x and 3.0x exit-vesting Class B Units will remain outstanding and eligible to vest for a six-month period following any such termination if the applicable vesting criteria are satisfied during the six-month period. If the exit-vesting units do not become vested following the end of the six-month period, they will be forfeited without consideration. The Class B Units granted to Messrs. Davies, Eyring and Santiago in 2016 also contain these termination terms. The Compensation Committee determined that such amendment to the terms of their awards would help secure the continued employment and dedication of Messrs. Davies, Eyring and Santiago.

Other than as described above with respect to Messrs. Pedersen, Dunn, Davies, Eyring and Santiago, any Class B Units that have not vested as of the date of termination of a named executive officer's employment will be immediately forfeited.

Put Rights

Prior to an initial public offering, if an executive officer's employment is terminated due to death or disability, such executive has the right, subject to specified limitations and for a specified period following the termination date, to cause the Company to purchase on one occasion all, but not less than all, of such executive's vested Class B Units, in either case, at the fair market value of such units.

Call Rights Regarding Messrs. Pedersen's and Dunn's Class B Units

If Messrs. Pedersen or Dunn are terminated for any reason, or in the event of a restrictive covenant violation, the Company has the right, for a specified period following the termination of such executive's employment, to purchase all of such executive's vested Class B units as follows:

Triggering Event	Call Price	Put Price
Death or Disability	fair market value	fair market value
Termination With Cause or Voluntary Resignation When Grounds Exist for Cause	lesser of (a) fair market value and (b) cost	N/A
Termination Without Cause or Resignation For Good Reason	fair market value	N/A
Voluntary Resignation Without Good Reason Prior to November 16, 2014	lesser of (a) fair market value and (b) cost	N/A
Voluntary Resignation on or After November 16, 2014	fair market value	N/A
Restrictive Covenant Violation	lesser of (a) fair market value and (b) cost	N/A

Call Rights Regarding Other Executive Officers' Class B Units

With respect to our other executive officers, if the executive officer is terminated for any reason, in the event of a restrictive covenant violation or if the executive engages in any conduct that would be a violation of a restrictive covenant set forth in the executive's management unit subscription agreement but for the fact that the conduct occurred outside the relevant periods (any such conduct a "Competitive Activity"), then the Company has the right, for a specified period following the termination of such executive's employment, to purchase all of such executive's vested Class B units as follows:

Triggering Event	Call Price	Put Price
Death or Disability	fair market value	fair market value
Termination With Cause or Voluntary Resignation When Grounds Exist for Cause	lesser of (a) fair market value and (b) cost	N/A
Termination Without Cause	fair market value	N/A
Voluntary Resignation Prior to November 16, 2014, or, if Later, the Second Anniversary of Date of Hire	lesser of (a) fair market value and (b) cost	N/A
Voluntary Resignation on or After November 16, 2014, or, if Later, the Second Anniversary of Date of Hire	fair market value	N/A
Restrictive Covenant Violation	lesser of (a) fair market value and (b) cost	N/A
Competitive Activity Not Constituting a Restrictive Covenant Violation	fair market value	N/A

Restrictive Covenants

In addition, as a condition of receiving their units in Parent, our executive officers have agreed to specified restrictive covenants, including an indefinite covenant on confidentiality of information, and covenants related to non-disparagement, non-competition and non-solicitation of our employees and customers and affiliates at all times during the named executive officer's employment, and for specified periods after any termination of employment as set forth in the subscription agreement (two years for Messrs. Pedersen and Dunn and one-year non-compete and non-solicit periods and a three-year non-disparagement period for each of our other named executive officers).

Additional terms regarding the equity awards are summarized above under "Compensation Discussion and Analysis—Compensation Elements—Long-Term Equity Compensation" and under "Potential Payments Upon Termination or Change in Control" below.

Outstanding Equity Awards at 2016 Fiscal Year-End

The following table provides information regarding outstanding equity awards for our named executive officers as of December 31, 2016 . The equity awards held by the named executive officers are Class B Units, which represent an equity interest in Parent.

		Stock Awards			
Name	Grant Date	Number of Shares or Units of StockThat Have Not Vested (#) (1)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#) (3)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Todd R. Pedersen	11/16/2012	1,549,470	(2)	15,494,699	(2)
Mark J. Davies	9/20/2016	133,333	(2)	266,667	(2)
	3/3/2014	576,667	(2)	2,883,333	(2)
Alex J. Dunn	11/16/2012	1,549,470	(2)	15,494,699	(2)
Matthew J. Eyring	9/20/2016	283,333	(2)	566,667	(2)
	7/12/2013	288,333	(2)	2,883,333	(2)
Todd M. Santiago	9/20/2016	283,333	(2)	566,667	(2)
	7/12/2013	288,333	(2)	2,883,333	(2)

(1) Reflects the number of time-vesting Class B Units of Parent, which vest 20% over a five year period on each anniversary of November 16, 2012 or the applicable vesting reference date, subject to the executive's continued employment on such date. Additional terms of these time-vesting units are summarized under "Compensation Discussion and Analysis—Compensation Elements—Long-Term Equity Compensation," "Narrative Disclosure to Summary Compensation Table and Grants of Plan Based Awards Table—Equity Awards" and "Potential Payments Upon Termination or Change in Control."

Vesting of the time-vesting Class B Units will be accelerated upon a change of control that occurs while the executive is still employed by us and, as to Messrs. Pedersen and Dunn, will also continue to vest for one year following a qualifying termination, each as described under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards—Equity Awards."

(2) Because there was no public market for the Class B Units of Parent as of December 31, 2016 , the market value of such units was not determinable as of such date.
(3) Reflects exit-vesting Class B Units (of which one-half are 2.0x exit-vesting and one-half are 3.0x exit-vesting). Unvested exit-vesting Class B units vest as described under the "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards—Equity Awards" section above. As to (i) Messrs. Pedersen and Dunn, the 2.0x and 3.0x exit-vesting Class B Units will remain eligible to vest for one year following a qualifying termination if a change of control occurs during such one-year period and, as a result of such change of control, the respective exit-vesting conditions are met, and (ii) as to Messrs. Davies, Eyring and Santiago, 2.0x and 3.0x exit-vesting Class B Units will remain outstanding and eligible to vest for a six-month period following a termination by us without "cause" (as defined for the purposes of his employment agreement) and other than by reason of death or while he is disabled if the applicable vesting criteria are satisfied during the six-month period, each as described under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards—Equity Awards."

Option Exercises and Stock Vested in 2016

The following table provides information regarding the equity held by our named executive officers that vested during 2016 .

	Equity Awards	
Name	Number of Shares or Units Acquired on Vesting (#)	Value Realized on Vesting ($)
Todd R. Pedersen	1,549,470	(1)
Mark J. Davies	288,333	(1)
Alex J. Dunn	1,549,470	(1)
Matt J. Eyring	288,333	(1)
Todd M. Santiago	288,333	(1)

(1) Because there was no public market for the Class B Units of Parent as of December 31, 2016 , the market value of such units on the vesting date was not determinable.

Pension Benefits

We have no pension benefits for our executive officers.

Nonqualified Deferred Compensation

We have no nonqualified defined contribution or other nonqualified deferred compensation plans for our executive officers.

Potential Payments Upon Termination or Change in Control

The following section describes the potential payments and benefits that would have been payable to our named executive officers under existing plans and contractual arrangements assuming (1) a termination of employment or (2) a change of control occurred, in each case, on December 30, 2016, the last business day of fiscal 2016 . The amounts shown in the table do not include payments and benefits to the extent they are provided generally to all salaried employees upon termination of employment and do not discriminate in scope, terms or operation in favor of the named executive officers. These include distributions of plan balances under our 401(k) savings plan and similar items.

Messrs. Pedersen and Dunn

Pursuant to their respective employment agreements, if Mr. Pedersen's or Mr. Dunn's employment terminates for any reason, the executive is entitled to receive: (1) any base salary accrued through the date of termination; (2) any annual bonus earned, but unpaid, as of the date of termination; (3) reimbursement of any unreimbursed business expenses properly incurred by the executive; and (4) such employee benefits, if any, as to which the executive may be entitled under our employee benefit plans (the payments and benefits described in (1) through (4) being "accrued rights").

If the employment of Messrs. Pedersen and Dunn is terminated by us without "cause" (as defined below) (other than by reason of death or while he is disabled) or if either executive resigns with "good reason" (as defined below) (any such termination, a "qualifying termination"), such executive is entitled to the accrued rights and, conditioned upon execution and non-revocation of a release and waiver of claims in favor of us and our affiliates, and continued compliance with the non-compete, non-solicitation, non-disparagement, and confidentiality provisions set forth in the employment agreements and described above under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards":

- a pro rata portion of his target annual bonus based upon the portion of the fiscal year during which the executive was employed (the "pro rata bonus");
- a lump-sum cash payment equal to 200% of the executive's then-current base salary plus 200% of the actual bonus the executive received in respect of the immediately preceding fiscal year (or, if a termination of employment occurs prior

to any annual bonus becoming payable under his employment agreement, the target bonus for the immediately preceding fiscal year); and

- a lump-sum cash payment equal to the cost of the health and welfare benefits for the executive and his dependents, at the levels at which the executive received benefits on the date of termination, for two years (the “COBRA payment”).

For purposes of the employment agreements of each of Messrs. Pedersen and Dunn, the term “cause” means the executive’s continued failure to substantially perform his employment duties for a period of ten (10) days; any dishonesty in the performance of the executive’s employment duties that is materially injurious to us; act(s) on the executive’s part constituting either a felony or a misdemeanor involving moral turpitude; the executive’s willful malfeasance or misconduct in connection with his employment duties that causes substantial injury to us; or the executive’s material breach of any covenants set forth in the employment agreements, including the restrictive covenants set forth therein. A termination for “good reason” is deemed to occur upon specified events, including: a material reduction in the executive’s base salary; a material reduction in the executive’s authority or responsibilities; specified relocation events; or our breach of any of the provisions of the employment agreements. Each of the foregoing events is subject to specified notice and cure periods.

In the event of the executive’s termination of employment due to death or disability, he will only be entitled to the accrued rights, the pro rata bonus payment, and the COBRA payment.

Messrs. Davies, Eyring and Santiago

Pursuant to their respective employment agreements, if the employment of Messrs. Davies, Eyring or Santiago terminates for any reason, the executive is entitled to receive: (1) any base salary accrued through the date of termination; (2) reimbursement of any unreimbursed business expenses properly incurred by the executive; and (3) such employee benefits, if any, as to which the executive may be entitled under the Company’s employee benefit plans (the payments and benefits described in (1) through (3) being “accrued rights”).

If the employment of Messrs. Davies, Eyring or Santiago is terminated by us without “cause” (as defined below) and other than by reason of death or while he is disabled (any such termination, a “qualifying termination”), such executive is entitled to the accrued rights and, conditioned upon execution and non-revocation of a release and waiver of claims in favor of the Company and its affiliates, and continued compliance with the non-compete, non-solicitation, non-disparagement, and confidentiality provisions set forth in the employment agreements:

- a pro rata portion of his target annual bonus based upon the portion of the fiscal year during which the executive was employed (the “pro rata bonus”);
- a lump-sum cash payment equal to 150% of the executive’s then-current base salary plus 150% of the actual bonus the executive received in respect of the immediately preceding fiscal year (or, if a termination of employment occurs prior to any annual bonus becoming payable under his employment agreement, the target bonus for the immediately preceding fiscal year); and
- a lump-sum cash payment equal to the cost of the health and welfare benefits for the executive and his dependents, at the levels at which the executive received benefits on the date of termination, for 18 months (the “COBRA payment”).

Under the employment agreements for Messrs. Davies, Eyring, and Santiago, “cause” means the executive’s continued failure to substantially perform his employment duties for a period of ten (10) days following written notice from the Company; any dishonesty in the performance of the executive’s employment duties that is materially injurious to the Company; act(s) on the executive’s part constituting either a felony or a misdemeanor involving moral turpitude; the executive’s willful malfeasance or misconduct in connection with his employment duties that causes substantial injury to us; or the executive’s material breach of the restrictive covenants set forth in the employment agreements. Each of the foregoing events is subject to specified notice and cure periods.

In the event of the executive’s termination of employment due to death or disability, he will only be entitled to the accrued rights, the pro rata bonus payment, and the COBRA payment.

The following table lists the payments and benefits that would have been triggered for Messrs. Pedersen, Davies, Dunn Eyring and Santiago under the circumstances described below assuming that the applicable triggering event occurred on December 30, 2016.

Name	Cash Severance ($)(1)	Prorated Bonus ($)(2)	Continuation of Health Benefits ($)(3)	Accrued But Unused Vacation ($)(4)	Value of Accelerated Equity ($)(5)	Total ($)
Todd R. Pedersen						
Termination Without Cause or for Good Reason	2,640,000	660,000	27,785	63,462	—	3,391,247
Change of Control	—	—	—	—	—	—
Death or Disability	—	660,000	27,785	63,462	—	751,247
Mark J. Davies						
Termination Without Cause or for Good Reason	1,440,000	360,000	20,839	34,615	—	1,855,454
Change of Control	—	—	—	—	—	—
Death or Disability	—	360,000	—	34,615	—	394,615
Alex J. Dunn						
Termination Without Cause or for Good Reason	2,640,000	660,000	27,785	50,769	—	3,378,554
Change of Control	—	—	—	—	—	—
Death or Disability	—	660,000	27,785	50,769	—	738,554
Matthew J. Eyring						
Termination Without Cause or for Good Reason	1,440,000	360,000	20,839	34,615	—	1,855,454
Change of Control	—	—	—	—	—	—
Death or Disability	—	360,000	—	34,615	—	394,615
Todd M. Santiago						
Termination Without Cause or for Good Reason	1,440,000	360,000	20,839	34,615	—	1,855,454
Change of Control	—	—	—	—	—	—
Death or Disability	—	360,000	—	34,615	—	394,615

(1) Messrs. Pedersen and Dunn's cash severance reflects a lump sum cash payment equal to the sum of (x) 200% of the executive's base salary of $660,000 and (y) 200% of the executive's respective actual annual bonus for the preceding fiscal year. For fiscal 2016, Messrs. Pedersen and Dunn each received an annual bonus of $660,000. Messrs. Davies, Eyring and Santiago's cash severance reflects a lump sum cash payment equal to the sum of (x) 150% of the executive's base salary of $600,000 and (y) 150% of the executive's respective actual annual bonus for the preceding fiscal year. For fiscal 2016, Messrs.Davies, Eyring and Santiago each received an annual bonus of $360,000.

(2) Reflects the executive's target bonus for the 12 completed months of employment for the 2016 fiscal year.

(3) For Messrs. Pedersen and Dunn reflects the cost of providing the executive officer with continued health and welfare benefits for the executive and his dependents under COBRA for two years and assuming 2016 rates. For Messrs. Davies, Eyring and Santiago reflects the cost of providing the executive officer with continued health and welfare benefits for the executive and his dependents under COBRA for 18 months and assuming 2016 rates.

(4) Amounts reported in this column reflect the following number of accrued but unused vacation days: Mr. Pedersen, 25 days; Mr. Davies, 15 days; Mr. Dunn, 20 days; Mr. Eyring, 15 days and Mr. Santiago, 15 days.

(5) Upon a change of control each of Messrs. Pedersen's, Davies', Dunn's, Eyring's and Santiago's unvested time-vesting Class B Units would become immediately vested. However, because there was no public market for the Class B Units as of December 30, 2016 , the market value of such Class B Units was not determinable. In addition, the unvested 2.0x and 3.0x exit-vesting Class B Units would vest upon a change of control if the applicable exit-vesting hurdles were met. Amounts reported assume that the exit-vesting Class B Units do not vest upon a change of control.

Messrs. Davies, Eyring and Santiago

In addition, as described above under "Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards—Equity Awards—Restrictive Covenants," as a condition of receiving their units in Parent, Messrs. Davies, Eyring and Santiago agreed to specified restrictive covenants for specified periods upon a termination of employment, including an indefinite covenant on confidentiality of information, and one-year non-competition and non-solicitation covenants and a three-year non-disparagement covenant.

Director Compensation

The members of our Board of Directors other than David D'Alessandro, who was elected to the Board of Directors in fiscal 2013, and Paul Galant and Joseph S. Tibbetts, Jr., who were elected to the Board of Directors in October 2015, received no additional compensation for serving on the Board of Directors or our Audit or Compensation Committees during 2016 .

In connection with the election of each of Messrs. D'Alessandro, Galant and Tibbetts, the Company entered into a letter agreement setting forth the compensation terms related to his service on the Board of Directors. Pursuant to their respective letter agreements, the Company will pay each of them an annual retainer of $150,000 per year, and Messrs. D'Alessandro, Galant and Tibbetts will not be eligible for any bonus amounts or be eligible to participate in any of the Company's employee benefit plans.

In addition, in 2013, an affiliate of Mr. D'Alessandro was granted 500,000 Class B Units, which are similar to the Class B Units granted to the named executive officers. The Class B Units are divided into a time-vesting portion (one-third of the Class B Units granted), a 2.0x exit-vesting portion (one-third of the Class B Units granted), and a 3.0x exit-vesting portion (one-third of the Class B Units granted). The vesting terms of these units are substantially similar to the Class B Units previously granted to our named executive officers and are described under "Narrative to Summary Compensation Table and Grants of Plan-Based Awards—Equity Awards" and the "vesting reference date" is July 18, 2013. However, if Mr. D'Alessandro ceases to serve on the Board of Directors, all unvested time-vesting Class B Units will be forfeited, and a percentage of the exit-vesting Class B Units will be forfeited with such percentage equal to 100% prior to July 31, 2014, 80% prior to July 31, 2015, 60% prior to July 31, 2016, 40% prior to July 31, 2017, 20% prior to July 31, 2018 and 0% on or after July 31, 2018.

On September 20, 2016, each of Messrs. Galant and Tibbetts was granted an award of stock appreciation rights pursuant to the Vivint Group, Inc. Amended and Restated 2013 Omnibus Incentive Plan covering 84,034 shares of common stock of Vivint Group, Inc., with a strike price of $1.19 per share, which become vested and exercisable on July 1, 2017. Upon exercise of a vested SAR, Vivint shall pay the holder an amount equal to the number of shares subject to such vested SAR which are being exercised, multiplied by the excess of the fair market value of one share over the applicable strike price, and reduced by the aggregate amount of all applicable income and employment taxes required to be withheld.

The following table provides information on the compensation of our non-management directors in fiscal 2016 .

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($) (1)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
David F. D'Alessandro	150,000	—	—	—	—	—	150,000
Paul S. Galant	150,000	7,500	—	—	—	—	157,500
Bruce McEvoy (2)	—	—	—	—	—	—	—
Jay D. Pauley (2)	—	—	—	—	—	—	—
Joseph S. Tibbetts, Jr.	150,000	7,500	—	—	—	—	157,500
Peter F. Wallace (2)	—	—	—	—	—	—	—

(1) As of December 31, 2016 , Mr. D'Alessandro held 66,650 unvested time-vesting Class B Units and 333,350 unvested Class B Units subject to exit-vesting criteria and each of Messrs. Galant and Tibbetts held stock appreciation rights covering 84,034 shares of common stock of Vivint Group, Inc., which become vested and exercisable on July 1, 2017.

(2) Employees of Blackstone and Summit Partners do not receive any compensation from us for their services on our Board of Directors.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Acquisition LLC owns 99.6% of the issued and outstanding shares of common stock of APX Parent Holdco, Inc., which, in turn, owns 100% of the issued and outstanding shares of common stock of Parent Guarantor, which, in turn owns 100% of the issued and outstanding shares of common stock of the Issuer.

The following table sets forth certain information as of December 31, 2016 with respect to Class A limited liability company interests in Acquisition LLC ("Class A Units") beneficially owned by (i) each person known by us to be the beneficial owner of more than 5% of the outstanding Class A Units, (ii) each of our directors, (iii) each of our named executive officers and (iv) all of our directors and executive officers as a group.

The amounts and percentages of shares of Class A Units beneficially owned are reported on the basis of SEC regulations governing the determination of beneficial ownership of securities. Under SEC rules, a person is deemed to be a "beneficial owner" of a security if that person has or shares voting power or investment power, which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Securities that can be so acquired are deemed to be outstanding for purposes of computing such person's ownership percentage, but not for purposes of computing any other person's percentage. Under these rules, more than one person may be deemed to be a beneficial owner of the same securities and a person may be deemed to be a beneficial owner of securities as to which such person has no economic interest.

Except as indicated in the footnotes to the table, each of the unitholders listed below has sole voting and investment power with respect to Class A Units owned by such unitholder. Unless otherwise noted, the address of each beneficial owner is c/o APX Group, Inc. 4931 North 300 West, Provo, Utah 84604.

	Class A Units	
Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class
Principal Unitholders:		
Blackstone Funds(1)(2)	579,077,203	74%
Summit Funds(1)(3)	50,000,000	6%
Directors and Named Executive Officers(4):		
Todd R. Pedersen	96,479,649	12%
Alex J. Dunn	5,279,981	1%
David F. D'Alessandro	—	—
Bruce McEvoy(5)	—	—
Jay D. Pauley	—	—
Joseph S. Tibbetts, Jr.	—	—
Paul S. Galant	—	—
Peter F. Wallace(5)	—	—
Mark J. Davies	—	—
Matthew J. Eyring	—	—
Todd M. Santiago	1,500,000	*
All Directors and Executive Officers as a Group (9 persons)	104,884,630	13%

* Indicates less than 1%

(1) The limited liability company agreement of Acquisition LLC (the "LLC Agreement") provides that the business and affairs of Acquisition LLC will be managed by the Board of Directors, initially comprised of five members, three of whom will be appointed by Blackstone, one of whom will be appointed by Mr. Pedersen, and one of whom will be appointed by the Summit Funds, and Blackstone Capital Partners VI L.P. ("BCP VI") acting as managing member (in

such capacity, the "Managing Member"). The Managing Member is an affiliate of Blackstone and will have the ability to appoint its own successor if it resigns its position as Managing Member. Effective July 30, 2013, the Managing Member increased the size of the Board of Directors from five to six members and appointed Mr. D'Alessandro to the Board of Directors. Pursuant to the LLC Agreement, Members of Acquisition LLC, including employee members, will be deemed to have voted their respective limited liability company interests in Acquisition LLC in favor of all actions taken by the Board of Directors and the Managing Member. The Managing Member, the Blackstone entities described below, and Stephen A. Schwarzman may be deemed to beneficially own all the outstanding shares of common stock of the Issuer indirectly beneficially owned by Acquisition LLC, directly held by its wholly owned indirect subsidiary Parent Guarantor and all of the limited liability company interests in Acquisition LLC. Each of the Managing Member, such Blackstone entities and Mr. Schwarzman disclaim beneficial ownership of such shares of common stock of the Issuer and limited liability company interests in Acquisition LLC (other than the Blackstone Funds to the extent of their direct holdings).

(2) Represents (i) 436,112,143.59 Class A Units directly held by BCP VI, (ii) 2,644,957.26 Class A Units directly held by Blackstone Family Investment Partnership VI—ESC L.P. ("BFIP VI—ESC"), (iii) 220,012.15 Class A Units directly held by Blackstone Family Investment Partnership VI L.P. ("BFIP VI") and (iv) 140,100,090 Class A Units directly held by Blackstone VNT Co-Invest, L.P. ("VNT") (BCP VI, BFIP VI-ESC, BFIP VI and VNT are collectively referred to as the "Blackstone Funds"). BCP VI Side-by-Side GP L.L.C. is the general partner of each of BFIP VI-ESC and BFIP VI. Blackstone Management Associates VI L.L.C. is the general partner of each of BCP VI and VNT. BMA VI L.L.C. is the sole member of Blackstone Management Associates VI L.L.C. Blackstone Holdings III L.P. is the managing member of BMA VI L.L.C. and the sole member of BCP VI Side-by-Side GP L.L.C. The general partner of Blackstone Holdings III L.P. is Blackstone Holdings III GP L.P. The general partner of Blackstone Holdings III GP L.P. is Blackstone Holdings III GP Management L.L.C. The sole member of Blackstone Holdings III GP Management L.L.C. is The Blackstone Group L.P. The general partner of The Blackstone Group L.P. is Blackstone Group Management L.L.C. Blackstone Group Management L.L.C. is wholly owned by Blackstone's senior managing directors and controlled by its founder, Stephen A. Schwarzman. Each of such Blackstone entities and Mr. Schwarzman may be deemed to beneficially own the limited liability company interests in Acquisition LLC beneficially owned by the Blackstone Funds directly or indirectly controlled by it or him, but each disclaims beneficial ownership of such limited liability company interests in Acquisition LLC (other than the Blackstone Funds to the extent of their direct holdings). The address of each of Mr. Schwarzman and each of the other entities listed in this footnote is c/o The Blackstone Group L.P., 345 Park Avenue, New York, New York 10154.

(3) Class A Units shown as beneficially owned by the Summit Funds (as hereinafter defined) are held by the following entities: (i) Summit Partners Growth Equity Fund VIII-A, L.P. ("SPGE VIII-A") owns 36,490,138.53 Class A Units, (ii) Summit Partners Growth Equity Fund VIII-B, L.P. ("SPGE VIII-B") owns 13,330,631.47 Class A Units, (iii) Summit Investors I, LLC ("SI") owns 164,980 Class A Units and (iv) Summit Investors I (UK), LP ("SI(UK)" and together with SPGE VIII-A, SPGE VIII-B and SI, the "Summit Funds") owns 14,250 Class A Units. Summit Partners, L.P. is (i) the managing member of Summit Partners GE VIII, LLC, which is the general partner of Summit Partners GE VIII, L.P., which is the general partner of each of Summit Partners Growth Equity Fund VIII-A, L.P. and Summit Partners Growth Equity Fund VIII-B, L.P., and (ii) the manager of Summit Investors Management, LLC, which is the managing member of Summit Investors I, LLC and the general partner of Summit Investors I (UK), L.P. Summit Partners, L.P., through a three-person investment committee currently composed of Peter Y. Chung, Bruce R. Evans and Martin J. Mannion, has voting and dispositive authority over the Units held by the Summit Funds. Each of such Summit entities and therefore Summit Partners, L.P. may be deemed to beneficially own limited liability company interests in Acquisition LLC beneficially owned by the Summit Funds directly or indirectly controlled by it, but each disclaims beneficial ownership of such limited liability company interests in Acquisition LLC (other than Summit Partners, L.P. and other than the Summit Funds to the extent of their direct holdings). The address of each of these entities and Messrs. Chung, Evans and Mannion is 222 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.

(4) Certain directors and executive officers also own profits interests in Acquisition LLC, having economic characteristics similar to stock appreciation rights, in the form of Class B Units of Acquisition LLC, as described under "Management—Executive Compensation—Compensation Discussion and Analysis—Long-term Incentive Compensation". Directors and executive officers as a group hold an aggregate of 73,919,456 Class B Units.

(5) Messrs. McEvoy and Wallace are each employees of affiliates of the Blackstone Funds, but each disclaims beneficial ownership of the limited liability company interests in Acquisition LLC beneficially owned by the Blackstone Funds. The address for Messrs., McEvoy and Wallace is c/o The Blackstone Group L.P., 345 Park Avenue, New York, New York 10154.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Support and Services Agreement

In connection with the Merger, we entered into a support and services agreement with Blackstone Management Partners L.L.C. ("BMP"), an affiliate of Blackstone. Under the support and services agreement, we paid BMP, at the closing of the Merger, an approximately $20.0 million transaction fee as consideration for BMP undertaking due diligence investigations and financial and structural analysis and providing corporate strategy and other advice and negotiation assistance in connection with the Merger. In addition, we have agreed to reimburse BMP for any out-of-pocket expenses incurred by BMP and its affiliates and to indemnify BMP and its affiliates and related parties, in each case, in connection with the Transactions and the provision of services under the support and services agreement.

Monitoring Services and Fees

In addition, under this agreement, we have engaged BMP to provide, directly or indirectly, monitoring, advisory and consulting services that may be requested by us in the following areas: (a) advice regarding the structure, distribution and timing of debt and equity offerings and advice regarding relationships with our lenders and bankers, (b) advice regarding the structuring and implementation of equity participation plans, employee benefit plans and other incentive arrangements for certain of our key executives, (c) general advice regarding dispositions and/or acquisitions, (d) advice regarding the strategic direction of our business of Parent Guarantor, the Surviving Company and such other advice directly related or ancillary to the above advisory services as may be reasonably requested by us. These services will generally be provided until the first to occur of (i) the tenth anniversary of the closing date of the Merger (November 16, 2022), (ii) the date of a first underwritten public offering of shares of our common stock listed on the New York Stock Exchange or Nasdaq's national market system for aggregate proceeds of at least $150 million (an "IPO") and (iii) the date upon which Blackstone owns less than 9.9% of our common stock or that of our direct or indirect controlling parent and such stock has a fair market value (as determined by Blackstone) of less than $25 million (each of the events specified in clauses (i) through (iii) above, the "Exit Date").

In consideration for the monitoring services we have paid BMP, at the closing of the Merger, a monitoring fee (for advisory services to the provided by BMP during the remainder of our 2012 fiscal year) and will pay at the beginning of each subsequent fiscal year a monitoring fee (for advisory services to be provided by BMP during such fiscal year). The monitoring fee paid at the closing of the Transactions was $0.7 million (which amount is equal to $2.7 million prorated based on the portion of fiscal 2012 which occurred after the Transactions). The monitoring fee payable for monitoring services in any subsequent fiscal year of ours will be equal to the greater of (i) a minimum base fee of $2.7 million (the "Minimum Annual Fee"), subject to adjustment as summarized below if we engage in a business combination or disposition that is "significant" (as defined in the Support and Services Agreement) and (ii) the amount of the monitoring fee paid in respect of the immediately preceding fiscal year, without regard to the post-fiscal year "true-up" adjustment described in the paragraph below (which will not yet have occurred at the time the annual monitoring fee is paid). We refer to the adjusted monitoring fee for any fiscal year of the Surviving Company as the "Monitoring Fee" for such fiscal year.

In the case of a significant business combination or disposition, if 1.5% of our pro forma consolidated EBITDA (as defined in the Support and Services Agreement) after giving effect to the business combination or disposition exceeds (in the case of a business combination) or is less than (in the case of a disposition) the then-current Monitoring Fee, the Monitoring Fee for the year in which the significant business combination or disposition occurs will be adjusted upward or downward, respectively, by the amount of such excess or shortfall, with such adjustment prorated based on the remaining full or partial fiscal quarters remaining in our then-current fiscal year. We will pay upward adjustments to the Monitoring Fee promptly upon availability of the pro forma income statement prepared in respect of such business combination. Downward adjustments to the Monitoring Fee will be effected through a rebate of the fee paid to BMP in that fiscal year. Subsequently, the Minimum Annual Fee applicable to full fiscal years following any significant business combination or disposition will be equal to 1.5% of our pro forma consolidated EBITDA after giving effect to the business combination or disposition (subject to further adjustments for subsequent significant business combinations and dispositions). However, in all cases (including in the case of a current-year rebate described above), the Monitoring Fee will always be at least $2.7 million and in no event will a rebate for a downward adjustment result in BMP retaining a monitoring fee of less than $2.7 million for monitoring services in respect of any particular fiscal year.

In addition to the adjustments to the Minimum Annual Fee and the Monitoring Fee in connection with significant business combinations or dispositions and the related payments or rebates described above, there may be other adjustments to the Monitoring Fee based on projected consolidated EBITDA and a post-fiscal year "true-up." If 1.5% of our projected consolidated EBITDA, as first presented to our board of directors by senior management during the last third of such fiscal year, is projected to exceed the amount of the monitoring fee already paid to BMP in respect of monitoring services due to be rendered during that fiscal year, we will pay BMP the amount of such excess as an upward adjustment to the Monitoring Fee within two business days of such presentation. Following the completion of each applicable fiscal year and within deadlines required by our revolving credit facility, our chief financial officer will certify to BMP the amount of our consolidated EBITDA for such fiscal year. If 1.5% of such certified consolidated EBITDA is greater than the Monitoring Fee previously paid to BMP for monitoring services rendered during that fiscal year (including the adjustment in respect of projected EBITDA described above), we will, jointly and severally, pay BMP the amount of such excess within two business days of such certification. If 1.5% of such certified consolidated EBITDA is less than the monitoring fee previously paid to BMP for services rendered during that fiscal year (including the adjustment in respect of projected consolidated EBITDA described above), the amount of such shortfall will be applied as a credit against the next payment by us of the Monitoring Fee to BMP. However, BMP will always be entitled to retain the Minimum Annual Fee as then in effect and BMP will have no obligation to rebate any amount that would result in BMP having been paid Monitoring Fees for monitoring services in an amount less than the Minimum Annual Fee applicable to the relevant fiscal year.

Upon (i) an IPO, or (ii) the date upon which Blackstone owns less than 50% of the common stock of the Company or its direct or indirect controlling parent, and such stock has a fair market value (as determined by Blackstone) of less than $25 million, we will pay to BMP a milestone payment equal to the present value of all Monitoring Fee payments that, absent such event occurring, would otherwise have accrued and been payable through the tenth anniversary of the date of the support and services agreement, based on the continued payment of a Monitoring Fee in an amount equal to the then-applicable estimate for the Monitoring Fee for the fiscal year of the Surviving Company in which such event occurs, discounted at a rate equal to the yield to maturity on the close of business on the second business day immediately preceding the date the payment is payable of the class of outstanding U.S. government bonds having a final maturity closest to such tenth anniversary date.

Portfolio Operations Support and Other Services

Under the support and services agreement, we have, retroactively to September 16, 2012 (the date of the transaction agreement relating to the Merger) and through the Exit Date (or an earlier date determined by BMP), engaged BMP to arrange for Blackstone's portfolio operations group to provide support services customarily provided by Blackstone's portfolio operations group to Blackstone's private equity portfolio companies of a type and amount determined by such portfolio services group to be warranted and appropriate. BMP will invoice us for such services based on the time spent by the relevant personnel providing such services during the applicable period and Blackstone's allocated costs of such personnel, but in no event shall we be obligated to pay more than $1.5 million during any calendar year.

Investor Securityholders' Agreement

In connection with the closing of the Merger, 313 Acquisition LLC and the Parent Guarantor entered into a Securityholders' Agreement (the "Securityholders' Agreement") with the Investors. The Securityholders' Agreement governs certain matters relating to ownership of 313 Acquisition LLC and the Parent Guarantor, including with respect to the election of directors of our parent companies, transfer of shares, including tag-along rights and drag-along rights, other special corporate governance provisions and registration rights (including customary indemnification provisions).

Agreements with Solar

Trademark / Service Mark License Agreement

On June 1, 2011, we and Solar entered into a Trademark / Service Mark License Agreement, or the Trademark Agreement. Pursuant to the Trademark Agreement, we granted Solar and its subsidiaries a non-exclusive license to use certain Vivint marks, subject to certain quality control requirements, in exchange for a fee per month of $0.01 per kilowatt hour of electricity generated by the solar equipment each month for each customer account. On June 10, 2013, the Trademark Agreement was amended and restated to grant Solar a royalty-free, non-exclusive license to the marks, and was applied retroactively to be in effect as of January 1, 2013. Solar may only use the marks to manufacture, purchase and distribute its solar energy systems for residential rooftop installation, as well as in advertising and promotional material. We generally have the right to consent to any sublicense of the marks. In connection with its recent initial public offering, Solar terminated this agreement and we do not expect any additional payments to us as a result of this termination. See "Agreements with Solar" below.

Master Backup Maintenance Service Agreement

On January 23, 2014, we entered into a Master Backup Maintenance Services Agreement, or the Master Maintenance Agreement, with Vivint Solar Provider, LLC, one of Solar's wholly owned subsidiaries, pursuant to which Vivint Solar Provider, LLC, engaged us as a backup provider of, among other tasks, specified maintenance, operations and customer services tasks related to Solar's solar energy systems owned by third parties. The Master Maintenance Agreement provides the framework for a form agreement to be entered into by us and Solar's investment funds. The form agreement requires us, upon certain triggering events, primarily the default of Vivint Solar Provider, LLC, to provide certain services and maintenance that it was providing. These services are to be provided at the cost incurred by us in providing such services, plus 10%. The agreement also requires each party to maintain certain levels of insurance coverage. In addition, Vivint Solar Provider, LLC, granted us a power of attorney to perform services and otherwise take action on behalf of Vivint Solar Provider, LLC, under the agreements covered by the agreement. Either party may terminate the agreement if the other fails to perform its material obligations and such failure is not remedied within 30 days of receipt of notice or upon the occurrence of a force majeure event that prevents such party from performing its obligations for a continuous 180 day period. Vivint Solar Provider, LLC, us, and one of Solar's investment funds entered into an addendum to the agreement, which provide that such investment fund would receive the backup services under the agreement. Vivint Solar Provider, LLC may also terminate the agreement if we become insolvent or by providing 60 days' prior written notice to us. In connection with its recent initial public offering, Solar terminated this agreement. See "Agreements with Solar" below.

Agreements in Connection with Solar's Initial Public Offering

In connection with Solar's initial public offering in 2014, we have negotiated on an arm's-length basis and entered into a number of agreements with Solar related to services and other support that we have provided and will provide to Solar, including:

- *Master Intercompany Framework Agreement* . This agreement establishes a framework for the ongoing relationship between us and Solar. This agreement contains master terms regarding the protection of each other's confidential information, and master procedural terms, such as notice procedures, restrictions on assignment, interpretive provisions, governing law and dispute resolution. We and Solar each make customary representations and warranties that will apply across all of the agreements between us, and we each agree not to damage the value of the goodwill associated with the "VIVINT" or "VIVINT SOLAR" marks. We agree to provide Solar notice if we plans to stop using or to abandon rights in the "VIVINT" mark in any country or jurisdiction, and Solar is permitted to take steps to prevent abandonment of the "VIVINT" mark. We each also agree not to make public statements about each other without the consent of the other or disparage one another.
- *Non-Competition Agreement* . In this agreement, we and Solar each define our current areas of business and our competitors, and agree not to directly or indirectly engage in the other's business for three years. Our area of business is defined as residential and commercial automation and security products and services, energy management (i.e., wireless or remote management and control of energy controlling or consuming devices in a residence, including thermostats, HVAC, lighting, other appliances and in-house consumption monitoring), products and services for accessing and using the Internet, products and services for the storage, access, retrieval, and sharing of data, fixed and mobile data services, audio/video entertainment services, healthcare and wellness services, content distribution network services, wholesale cloud computing services, demand response services and information security. Solar's area of business is defined as selling renewable energy and energy storage products and services. We and Solar may each engage in the business of energy inverters, aggregate consumption monitoring and micro-grid technology. We may not sell products and services to Solar's competitors. Solar may purchase products and services from specified Vivint competitors. Although Solar may not engage in our business for three years, we may engage in Solar's business in markets where Solar is not yet operating, including by selling customer leads to Solar's competitors (other than SolarCity Corporation). Once Solar begins operating in a market, we will provide those leads exclusively to Solar. This agreement permits us and Solar to make investments of up to 2.5% in any publicly traded company without violating the commitments in this agreement. This agreement also permits Solar to obtain financing from a Vivint competitor. Finally, in this agreement we also each agree that for five years, unless we or Solar obtain prior written permission from the other party, neither of us will solicit for employment any member of the other's executive or senior management team, or any of the other's employees who primarily manage sales, installation or servicing of the other's products and services. The commitment not to solicit those employees lasts for 180 days after the employee finishes employment with us or Solar. General purpose employment advertisements and contact initiated by an employee are not, however, considered solicitation.
- *Transition Services Agreement* . Pursuant to this agreement we will provide to Solar various enterprise services, including services relating to information technology and infrastructure, human resources and employee benefits, administration services and facilities-related services. We agreed to perform the services with the same degree of care and diligence that we take in performing services for our own operations. We also agreed to provide Solar with reasonable assistance with Solar's eventual transition to providing those services in-house or through the use of third-party service providers. Solar will pay us a sum of $313,000 per month for the services, which represents our good faith estimate of our full cost of providing the services to Solar, without markup or surcharge. As Solar transitions any

service from us to an alternate provider or in-house, the fees paid to us will be reduced accordingly, except for any third party license fees related to services we obtains for Solar that cannot be terminated or assigned to Solar. The agreement will also account for the possibility that new services will be required from us that were not initially addressed in the agreement. The initial term of this agreement is six months; however, we and Solar will seek to complete the transition of the services contemplated by this agreement as soon as commercially practicable.

- *Product Development and Supply Agreement* . Pursuant to this agreement, one of Solar's wholly owned subsidiaries will collaborate with us to develop certain monitoring and communications equipment that will be compatible with other equipment used in Solar's solar energy systems and will replace equipment Solar currently procures from third parties. The initial term of the agreement is three years, and it will automatically renew for successive one-year periods unless either party elects otherwise.
- *Marketing and Customer Relations Agreement* . This agreement governs various cross-marketing initiatives between us and Solar, in particular the provision of sales leads from each company to the other. In November 2016, the parties amended this agreement to update certain terms and conditions governing existing cross-marketing initiatives and to introduce new cross-marketing initiatives, including a pilot program with the purpose of exploring potential opportunities for each company to offer, sell and integrate the other company's respective products and services with its standard product offering. The term of this agreement, as amended, including the terms of the schedules defining the various cross-marketing initiatives, is up to three years.
- *Bill of Sale* . This agreement governs the transfer of certain assets such as office equipment from us to Solar.
- *Trademark License Agreement* . Pursuant to this agreement, the licensor, a special purpose subsidiary majority-owned by us and minority-owned by Solar, will grant Solar a royalty-free exclusive license to the trademark "VIVINT SOLAR" in the field of selling renewable energy or energy storage products and services. The agreement enables Solar to sublicense the Vivint Solar trademark to its subsidiaries and to certain third parties, such as suppliers and distributors, to the extent necessary for Solar to operate its business. The agreement governs how Solar may use and display the Vivint Solar trademark and provides that Solar may create new marks that incorporate "VIVINT SOLAR" with licensor's reasonable approval. The agreement also provides that the licensor will apply to register Vivint Solar trademarks as reasonably requested by Solar, and that Solar will work together with the licensor in enforcing and protecting the Vivint Solar trademarks. The agreement is perpetual but may be terminated voluntarily by Solar or by the licensor if (1) a court finds that Solar have materially breached the agreement and not cured such breach within 30 days after notice, (2) Solar becomes insolvent, makes an assignment for the benefit of creditors, or becomes subject to bankruptcy proceedings, (3) one of the parties (or us, with respect to the licensor) is acquired by a competitor of the other party, or (4) Solar ceases using the "VIVINT SOLAR" mark worldwide. We retain ownership of the Vivint trademark and Solar has no right to use "Vivint" except as part of "VIVINT SOLAR".

Procedures with Respect to Review and Approval of Related Person Transactions

From time to time, we may do business with certain companies affiliated with Blackstone. The board of directors has not adopted a formal written policy for the review and approval of transactions with related persons. However, the board of directors reviews and approves transactions with related persons as appropriate.

Independence of Directors

The information contained under the heading "Corporate Governance Matters - Independence of Directors" in Part III, Item 10. Directors, Executive Officers and Corporate Governance is incorporated by reference herein.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Disclosure of Fees Paid to Independent Registered Public Accounting Firm

Aggregate fees billed to the Company for the fiscal year ended December 31, 2016 and 2015 represent fees billed by the Company's principal independent registered public accounting firm, Ernst & Young LLP.

Fee Category	Year ended December 31, 2016	Year ended December 31, 2015
Audit Fees (a)	$ 1,656,000	$ 1,197,000
Audit-Related Fees	—	—
Total Audit and Audit-Related Fees	1,656,000	1,197,000
Tax Fees (b)	51,000	54,000
All Other Fees	—	—
Total	$ 1,707,000	$ 1,251,000

(a) Audit Fees primarily consisted of audit work performed for the preparation of the Company's annual consolidated financial statements and reviews of interim consolidated financial information and in connection with regulatory filings.
(b) Tax Fees included tax compliance, planning and support services.

The audit committee pre-approves all audit and non-audit services provided by its independent registered public accounting firm. The audit committee considered whether the non-audit services rendered by Ernst & Young LLP were compatible with maintaining Ernst & Young LLP's independence as the independent registered public accounting firm of the Company's consolidated financial statements and concluded they were.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements and Financial Statement Schedules

1. **Financial Statements:**

   Included in Part II, Item 8 of this Report.

2. **Financial Statement Schedules:**

   All other financial schedules are omitted because they are not applicable or not required, or because the information is included herein in our financial statements or the notes related thereto.

(b) Exhibits

EXHIBIT INDEX

Exhibit No.	Description
3.3	Certificate of Incorporation of APX Group Holdings, Inc. (incorporated by reference to Exhibit 3.3 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
3.4	Bylaws of APX Group Holdings, Inc. (incorporated by reference to Exhibit 3.4 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.1	Indenture, dated as of November 16, 2012, among APX Group, Inc., the guarantors named therein and Wilmington Trust, National Association, as trustee, relating to the Company's 6.375% Senior Secured Notes due 2019 (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.2	First Supplemental Indenture, dated as of December 20, 2012, among 313 Aviation, LLC and Wilmington Trust, National Association, as trustee, relating to the Company's 6.375% Senior Secured Notes due 2019 (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.3	Second Supplemental Indenture, dated as of May 14, 2013, among Vivint Wireless, Inc. and Wilmington Trust, National Association, as trustee, relating to the Company's 6.375% Senior Secured Notes due 2019 (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.4	Third Supplemental Indenture, dated as of December 18, 2014, among Vivint Wireless, Inc. and Wilmington Trust, National Association, as trustee, relating to the Company's 6.375% Senior Secured Notes due 2019 (incorporated by reference to Exhibit 4.4 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.5	Form of Note relating to Company's 6.375% Senior Secured Notes due 2019 (attached as exhibit to Exhibit 4.1) (incorporated by reference to Exhibit 4.4 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))

4.6	Indenture, dated as of November 16, 2012, among APX Group, Inc., the guarantors named therein and Wilmington Trust, National Association, as trustee, relating to the Company's 8.75% Senior Notes due 2020 (incorporated by reference to Exhibit 4.5 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.7	First Supplemental Indenture, dated as of December 20, 2012, among 313 Aviation, LLC and Wilmington Trust, National Association, as trustee, relating to the Company's 8.75% Senior Notes due 2020 (incorporated by reference to Exhibit 4.6 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.8	Second Supplemental Indenture, dated as of May 14, 2013, among Vivint Wireless, Inc. and Wilmington Trust, National Association, as trustee, relating to the Company's 8.75% Senior Notes due 2020 (incorporated by reference to Exhibit 4.7 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.9	Third Supplemental Indenture, dated as of May 31, 2013, among APX Group, Inc., the guarantors named therein and Wilmington Trust, National Association, as trustee, relating to the Company's 8.75% Senior Notes due 2020 (incorporated by reference to Exhibit 4.8 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.10	Fourth Supplemental Indenture, dated as of December 13, 2013, among APX Group, Inc., the guarantors named therein and Wilmington Trust, National Association, as trustee, relating to the Company's 8.75% Senior Notes due 2020 (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on December 13, 2013 (File Number: 333-191132-02))
4.11	Fifth Supplemental Indenture, dated as of July 1, 2014, among APX Group, Inc., the guarantors named therein and Wilmington Trust, National Association, as trustee, relating to the Company's 8.75% Senior Notes due 2020 (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on July 1, 2014 (File Number: 333-191132-02))
4.12	Sixth Supplemental Indenture, dated as of December 18, 2014, among APX Group, Inc., the guarantors named therein and Wilmington Trust, National Association, as trustee, relating to the Company's 8.75% Senior Notes due 2020 (incorporated by reference to Exhibit 4.12 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.13	Form of Note relating to Company's 8.75% Senior Notes due 2020 (attached as exhibit to Exhibit 4.6) (incorporated by reference to Exhibit 4.9 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
4.14	Indenture, dated as of May 26, 2016, among APX Group, Inc., the guarantors party thereto and Wilmington Trust, National Association, as trustee and collateral agent, relating to the Company's 7.875% Senior Secured Notes due 2022 (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on May 26, 2016 (File Number: 333-191132-02))
4.15	First Supplemental Indenture, dated as of August 17, 2016, among APX Group, Inc., the guarantors party thereto and Wilmington Trust, National Association, as trustee and collateral agent, relating to the Company's 7.875% Senior Secured Notes due 2022 (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on August 17, 2016 (File Number: 333-191132-02))

10.1	Amended and Restated Credit Agreement, dated as of June 28, 2013, among APX Group, Inc., the other guarantors party thereto, Bank of America, N.A., as Administrative Agent and the other lenders and parties thereto (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.2	Second Amended and Restated Credit Agreement, dated as of March 6, 2015, among APX Group, Inc., the other guarantors party thereto, Bank of America, N.A., as Administrative Agent and the other lenders and parties thereto (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on March 11, 2015. (File Number: 333-191132-02))
10.3	Security Agreement, dated as of November 16, 2012, among the grantors named therein and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.4	Security Agreement, dated as of November 16, 2012, among the grantors named therein and Wilmington Trust, National Association, as Collateral Agent (incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.5	Intercreditor Agreement and Collateral Agency Agreement, dated as of November 16, 2012, among 313 Group Inc., the other grantors named therein, Bank of America, N.A., as Credit Agreement Collateral Agent, Wilmington Trust, National Association, as Notes Collateral Agent, and each Additional Collateral Agent from time to time party thereto (incorporated by reference to Exhibit 10.4 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.6	Transaction Agreement, dated September 16, 2012, by and among 313 Acquisition LLC, 313 Group, Inc., 313 Solar, Inc., 313 Technologies, Inc., APX Group, Inc., V Solar Holdings, Inc. and 2GIG Technologies, Inc. (incorporated by reference to Exhibit 2.1 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.7†	Management Subscription Agreement (Co-Investment Units), dated as of November 16, 2012, between 313 Acquisition LLC and Todd Pedersen (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.8†	Management Subscription Agreement (Co-Investment Units), dated as of November 16, 2012, between 313 Acquisition LLC and Alex Dunn (incorporated by reference to Exhibit 10.6 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.9†	Management Subscription Agreement (Incentive Units), dated as of November 16, 2012, between Acquisition LLC and Todd Pedersen (incorporated by reference to Exhibit 10.7 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.10†	Management Subscription Agreement (Incentive Units), dated as of November 16, 2012, between Acquisition LLC and Alex Dunn (incorporated by reference to Exhibit 10.8 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.11†	Form of Management Subscription Agreement (Incentive Units) (incorporated by reference to Exhibit 10.9 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))

10.12†	Form of Management Subscription Agreement (Co-Investment Units) (incorporated by reference to Exhibit 10.10 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number: 333-191132-02))
10.13†	Amended and Restated 313 Acquisition LLC Unit Plan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on September 23, 2016 (File Number: 333-191132-02))
10.14†	Form of Aircraft Time-Sharing Agreement (incorporated by reference to Exhibit 10.12 to the Registration Statement on Form S-4 of APX Group Holdings, Inc. and the other registrants listed therein (File Number 333-191132-02))
10.15†	Employment Agreement, dated as of August 7, 2014, between APX Group, Inc. and Alex Dunn (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of APX Group Holdings, Inc. for the quarterly period ended September 30, 2015 (File Number: 333-191132-02))
10.16†	Employment Agreement, dated as of August 7, 2014, between APX Group, Inc. and Todd Pedersen (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q of APX Group Holdings, Inc. for the quarterly period ended September 30, 2015 (File Number: 333-193639))
10.17†	Employment Agreement, dated March 8, 2016, by and between APX Group, Inc. and Mark Davies (incorporated by reference to Exhibit 10.17 to the Annual Report on Form 10-K of APX Group Holdings, Inc. for the fiscal year ended December 31, 2015 (File Number 333-191132-02))
10.18†	Employment Agreement, dated March 8, 2016, by and between APX Group, Inc. and Todd Santiago (incorporated by reference to Exhibit 10.18 to the Annual Report on Form 10-K of APX Group Holdings, Inc. for the fiscal year ended December 31, 2015 (File Number 333-191132-02))
10.19*†	Employment Agreement, dated March 8, 2016, by and between APX Group, Inc. and Matthew Eyring
10.20†	Form of Letter Amendment, dated March 8, 2016, to Management Subscription Agreement (Incentive Units) (incorporated by reference to Exhibit 10.20 to the Annual Report on Form 10-K of APX Group Holdings, Inc. for the fiscal year ended December 31, 2015 (File Number 333-191132-02))
10.21	Form of Outside Director Offer Letter (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of APX Group Holdings, Inc. for the quarterly period ended September 30, 2015 (File Number: 333-191132-02))
10.22	Form of Note Purchase Agreement, relating to the Company's 8.875% Senior Secured Notes due 2022 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on October 19, 2015 (File Number: 333-191132-02))
12.1*	Computation of Ratio of Earnings to Fixed Charges
21.1*	Subsidiaries of APX Group, Inc.
31.1*	Certification of the Registrant's Chief Executive Officer, Todd Pedersen, pursuant to Rule 13a-14 of the Securities Exchange Act of 1934
31.2*	Certification of the Registrant's Chief Financial Officer, Mark Davies, pursuant to Rule 13a-14 of the Securities Exchange Act of 1934

32.1*	Certification of the Registrant's Chief Executive Officer, Todd Pedersen, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of the Registrant's Chief Financial Officer, Mark Davies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.1*	Section 13(r) Disclosure
99.2	Stock Purchase Agreement, dated as of February 13, 2013, by and among Nortek, Inc. and APX Group, Inc. (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K of Nortek, Inc. filed on April 1, 2013 (File Number: 001-34697))
99.3	Letter Agreement, dated as of July 20, 2015, between SunEdison, Inc., Vivint, Inc. and Vivint Solar, Inc. (incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K of APX Group Holdings, Inc. filed on July 22, 2015 (File Number: 333-191132-02))
101.1*	The following materials are formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Loss, (iv) the Consolidated Statements of Changes in Equity, (v) the Consolidated Statements of Cash Flows, (vi) Notes to Consolidated Financial Statements, and (vii) document and entity information. (A)

* Filed herewith.

† Identifies exhibits that consist of a management contract or compensatory plan or arrangement.

(A) Pursuant to Rule 406T of Regulation S-T, the Interactive Data files on Exhibit 101.1 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

Table of Contents

ITEM 16. FORM 10-K SUMMARY

None

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

APX GROUP HOLDINGS, INC.

By: /s/ MARK J. DAVIES
Mark J. Davies
Chief Financial Officer

Date: March 2, 2017

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Todd R. Pedersen and Mark J. Davies, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place, and stead, in any and all capacities, to sign any and all amendments to this Report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or any of them or their or his substitute or substituted, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities as of March 2, 2017 .

Name	Title
/s/ Todd R. Pedersen TODD R. PEDERSEN	Chief Executive Officer and Director (Principal Executive Officer)
/s/ Mark J. Davies MARK J. DAVIES	Chief Financial Officer (Principal Financial Officer)
/s/ Patrick E. Kelliher PATRICK E. KELLIHER	Chief Accounting Officer (Principal Accounting Officer)
/s/ Alex J. Dunn ALEX J. DUNN	President and Director
/s/ David F. D’Alessandro DAVID F. D’ALESSANDRO	Director
/s/ Paul S. Galant PAUL S. GALANT	Director
/s/ Bruce McEvoy BRUCE MCEVOY	Director
/s/ Jay D. Pauley JAY D. PAULEY	Director
/s/ Joseph S. Tibbetts, Jr. JOSEPH S. TIBBETTS, JR.	Director
/s/ Peter F. Wallace PETER F. WALLACE	Director

Exhibit 10.19

[Execution Copy]

EMPLOYMENT AGREEMENT
(Matt Eyring)

EMPLOYMENT AGREEMENT (the " Agreement ") dated March 8, 2016 (the " Effective Date ") by and between APX Group, Inc., a Delaware corporation (the " Company ") and Matt Eyring (" Executive ").

The Company desires for one or more of its subsidiaries to employ Executive and Executive desires to accept such employment, in each case effective as of the Effective Date (as defined below); and

The Company and Executive desire to enter into an agreement embodying the terms of such employment;

In consideration of the premises and mutual covenants herein and for other good and valuable consideration, the parties agree as follows:

1. Term of Employment . Subject to the provisions of Section 5 of this Agreement, Executive shall continue to be employed by the Company and/or one or more of its subsidiaries for a period commencing on the Effective Date and ending on the third anniversary of the Effective Date (the " Employment Term ") on the terms and subject to the conditions set forth in this Agreement; provided , however , the Employment Term shall be automatically extended for an additional one-year period commencing with the third anniversary of the Effective Date and, thereafter, on each such successive anniversary of the Effective Date thereafter (each an " Extension Date "), unless the Company or Executive provides the other party hereto at least 90 days prior written notice before the next Extension Date that the Employment Term shall not be so extended.

2. Position, Duties and Authority .

(a) During the Employment Term, Executive shall serve as the Company's Chief Strategy & Innovation Officer. In such position, Executive shall have such duties, functions, responsibilities and authority as shall be determined from time to time by the Chief Executive Officer (the " CEO ") and the President (the " President ") of the Company. Executive shall report directly to the CEO and the President. If requested by the Board of Directors of the Company (the " Board "), Executive shall also serve as a member of the Board without additional compensation.

(b) Executive will devote substantially all of Executive's business time and reasonable best efforts to the operation and oversight of the Company's businesses and performance of Executive's duties hereunder (excluding periods of vacation and sick leave) and will not engage in any other business activities that could conflict with his duties or services to the Company; provided that nothing herein shall preclude Executive, subject to obtaining consent of the Board (not to be unreasonably withheld), from (i) accepting appointment to or continuing to serve on any board of directors or trustees of any business corporation, and (ii) serving as an officer or director or otherwise participating in non-profit educational, welfare, social, religious and civil organizations.

3. Compensation .

(a) Base Salary . During the Employment Term, the Company shall pay Executive a base salary (" Base Salary ") at the annual rate of $515,000, payable in regular installments in accordance with the Company's usual payment practices. Executive's Base Salary shall be subject to annual review and subject to increase, if any, as may be determined from time to time in the sole discretion of the Board or the Compensation Committee of any direct or indirect parent of the Company, but in no event shall the Company be entitled to reduce Executive's Base Salary.

(b) Annual Bonus . During the Employment Term, Executive shall be eligible to earn an annual bonus award (an " Annual Bonus ") with a target amount equal to 50% of Executive's Base Salary at the end of the performance period (the " Annual Target Bonus "). The Annual Bonus, if any, shall be paid to Executive within two and one-half months after the end of the applicable fiscal year. Except as provided in Section 5, no Annual Bonus shall be payable in respect of any fiscal year in which Executive's employment is terminated.

4. Benefits .

(a) General . During the Employment Term, Executive shall be entitled to participate in the Company's employee benefit, fringe and perquisite plans, practices, policies and arrangements as in effect from time to time (collectively, " Employee Benefits "), on generally the same terms and conditions as each of the Employee Benefits are made available to other senior executives of the Company (other than with respect to annual bonuses, incentive plans and severance plans (as well as any other terms and conditions specifically determined under this Agreement), the benefits for each which shall be determined instead in accordance with this Agreement); provided that Executive shall be entitled to no less than four (4) weeks' vacation per calendar year.

(b) Reimbursement of Business Expenses . During the Employment Term, the Company shall reimburse Executive for reasonable and necessary business expenses incurred by Executive in the performance of Executive's duties hereunder in accordance with its then prevailing policy for senior executives (which shall include appropriate itemization and substantiation of expenses incurred).

5. Termination .

(a) The Employment Term and Executive's employment hereunder may be terminated by either party at any time and for any reason, subject to the notice and cure provisions set forth below. Notwithstanding any other provision of this Agreement, the provisions of this Section 5 shall exclusively govern Executive's rights upon termination of employment with the Company and its affiliates.

(b) By the Company for Cause or by Executive for any reason.

(i) The Employment Term and Executive's employment hereunder may be terminated by the Company for Cause and shall terminate automatically upon the effective date of Executive's resignation for any reason).

(ii) *Definition of Cause* . For purposes of this Agreement, "Cause" shall mean (A) Executive's continued failure substantially to perform Executive's employment duties (other than as a result of total or partial incapacity due to physical or mental illness) for a period of 10 days following written notice by the Company to Executive of such failure, (B) dishonesty in the performance of Executive's employment duties that is materially injurious to the Company, (C) an act or acts on Executive's part constituting (x) a felony charge under the laws of the United States or any state thereof or (y) a misdemeanor charge involving moral turpitude, (D) Executive's willful malfeasance or willful misconduct in connection with Executive's employment duties which causes substantial injury to the financial condition or business reputation of the Company or any of its subsidiaries or affiliates or (E) the Executive's breach of any of the covenants set forth in Section 6 (other than any action taken in good faith and in a manner not opposed to the best interests of the Company, and which is promptly remedied by Executive upon notice by the Board); provided that none of the foregoing events shall constitute Cause unless Executive fails to cure such event and remedy any adverse or injurious consequences arising from such events within 10 days after receipt from the Company of written notice of the event which constitutes Cause (except that no cure or remedy period shall be provided if the event or such consequences are not capable of being cured and remedied).

(iii) If Executive's employment is terminated by the Company for Cause, Executive shall be entitled to receive:

(A) no later than 10 days following the date of termination, the Base Salary through the date of termination;

(B) reimbursement, within 60 days following receipt by the Company of Executive's claim for such reimbursement (including appropriate supporting documentation), for any unreimbursed business expenses properly incurred by Executive in accordance with Company policy prior to Executive's termination; provided that such claims for such reimbursement are submitted to the Company within 90 days following the date of Executive's termination of employment; and

(C) such Employee Benefits, if any, as to which Executive may be entitled under the tax qualified employee benefit plans of the Company, payable in accordance with the terms and conditions of such tax qualified employee benefit plans (the amounts described in clauses (A) through (C) hereof being referred to as the " Accrued Rights ").

For the avoidance of doubt, in any legal proceeding to determine whether grounds for Cause existed on any date that the Company took action on the basis of the existence of Cause, the Company shall bear the burden of demonstrating grounds for Cause existed on such date.
Following such termination of Executive's employment by the Company for Cause, except as set forth in this Section 5(b)(iii), Executive shall have no further rights to any compensation or any other benefits under this Agreement.

(iv) If Executive resigns for any reason, provided that Executive will be required to give the Company at least 60 days advance written notice of such resignation of Executive's employment, Executive shall be entitled to receive the Accrued Rights. Following such resignation by Executive for any reason, except as set forth in this Section 5(b)(iv), Executive shall have no further rights to any compensation or any other benefits under this Agreement.

(c) Disability or Death .

(i) *Disability.* During any period that Executive fails to perform his duties hereunder as a result of incapacity due to physical or mental illness or injury (the " Disability Period "), Executive shall continue to receive his full Base Salary set forth in Section 3(a) until his employment is terminated pursuant to Section 5(a). For purposes of this Agreement, " Disability " shall mean Executive's inability to perform, with or without reasonable accommodation, Executive's duties under this Agreement due to a physical or mental illness or injury for a period of six consecutive months or for an aggregate of 12 months in any consecutive 24-month period. Any question as to the existence of the Disability of Executive as to which Executive and the Company cannot agree shall be determined in writing by a qualified independent physician mutually acceptable to Executive and the Company. If Executive and the Company cannot agree as to a qualified independent physician, each shall appoint such a physician and those two physicians shall select a third physician who shall make such determination in writing. The determination of Disability made in writing to the Company and Executive shall be final and conclusive for all purposes of this Agreement.

(ii) Upon termination of Executive's employment hereunder for either Disability or death, Executive or Executive's estate, survivors or beneficiaries (as the case may be) shall be entitled to receive:

(A) the Accrued Rights;

(B) any Annual Bonus earned, but unpaid, as of the date of termination for the immediately preceding fiscal year, paid in accordance with Section 3(b) (except to the extent payment is otherwise deferred pursuant to any applicable deferred compensation arrangement with the Company, in which case such payment shall be made in accordance with the terms and conditions of such deferred compensation arrangement);

(C) no later than 10 days following the date of termination, a pro rata portion of the Annual Target Bonus payable for the fiscal year in which such termination occurs, based on a fraction, the numerator of which is the number of days during the fiscal year up to and including the date of termination of Executive's employment and the denominator of which is the number of days in such fiscal year (the " Pro-Rated Bonus "); and

(D) death or disability benefits under any applicable plans and programs of the Company in accordance with the terms and provisions of such plans and programs.

(d) By the Company Without Cause (other than by reason of death or Disability).

(i) If Executive's employment is terminated by the Company without Cause (other than by reason of death or Disability), Executive shall be entitled to receive:

(A) the Accrued Rights;

(B) the Pro-Rated Bonus;

(C) subject to Executive's continued compliance with Section 6 and material compliance with Section 7 hereof, and the execution and non-revocation of the Release (as defined below), a lump-sum cash payment within 55 days after such termination and effectiveness of the Release equal to the sum of (x) 150% of Executive's Base Salary as of the date immediately prior to Executive's termination of employment and (y) 150% of the actual Annual Bonus paid in respect of the immediately preceding fiscal year (or, if such termination occurs prior to the first date on which an Annual Bonus would have been paid had any payment been due, the Target Annual Bonus for the immediately preceding fiscal year), and (z) a cash payment representing the COBRA costs of providing health and welfare benefits for Executive and Executive's dependents under the plans in which Executive was participating on the date of the applicable "COBRA qualifying event" for 18 months (the " COBRA Payment ").

(ii) Release . Amounts payable to Executive under Section 5(c)(ii)(C) or Sections 5(d)(i)(B) and 5(d)(i)(C) (collectively, the " Conditioned Benefits ") are subject to (i) Executive's execution and non-revocation of a release of claims, substantially in the form attached hereto as Exhibit I (the " Release "), within 60 days of the date of termination and (ii) the expiration of any revocation period contained in such Release. Further, to the extent that any of the Conditioned Benefits constitutes "nonqualified deferred compensation" for purposes of Section 409A of the Internal Revenue Code of 1986, as amended (the " Code "), any payment of any amount or provision of any benefit otherwise scheduled to occur prior to the sixtieth (60 th) day following the date of Executive's termination of employment hereunder, but for the condition on executing the Release as set forth herein, shall not be made until the first regularly scheduled payroll date following such sixtieth (60 th) day, after which any remaining Conditioned Benefits shall thereafter be provided to Executive according to the applicable schedule set forth herein.

(e) Expiration of Employment Term . Unless the parties otherwise agree in writing, continuation of Executive's employment with the Company following the expiration of the Employment Term shall be deemed an employment at-will and shall not be deemed to extend any of the provisions of this Agreement and Executive's employment may thereafter be terminated at will by either Executive or the Company; provided that the provisions of Sections 6, 7 and 8 of this Agreement shall survive any termination of this Agreement or Executive's termination of employment hereunder.

(f) Notice of Termination; Board/Committee Resignation . Any purported termination of employment by the Company or by Executive (other than due to Executive's death) pursuant to Section 5 of this Agreement shall be communicated by written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of employment under the provision so indicated. Upon termination of Executive's employment for any reason, Executive agrees to resign, as of the date of such termination and to the extent applicable, from the Board (and any committees thereof) and the Board of Directors (and any committees thereof) of any of the Company's affiliates (except to the extent Executive is otherwise entitled pursuant to a separate contractual arrangement to continue to serve as a member of the Board).

6. Non-Competition; Non-Solicitation . Executive acknowledges and recognizes the highly competitive nature of the businesses of the Company and its affiliates and accordingly agrees as follows:

(a) Non-Competition .

(i) During Executive's employment hereunder and, for a period of 18 months following the date Executive ceases to be employed by the Company (the " Restricted Period "), Executive will not, whether on Executive's own behalf or on behalf of or in conjunction with any person, firm, partnership, joint venture, association, corporation or other business organization, entity or enterprise whatsoever (" Person "), directly or indirectly solicit or assist in soliciting in competition with the Restricted Group in the Business the business of any then current or prospective client or customer with whom Executive (or Executive's direct reports) had personal contact or dealings on behalf of the Company during the one-year period preceding Executive's termination of employment.

(ii) During the Restricted Period, Executive will not directly or indirectly:

(A) engage in the Business anywhere in the United States, or in any geographical area that is within 100 miles of any geographical area where the Restricted Group engages in the Business, including, for the avoidance of doubt, by entering into the employment of or rending any services to a Core Competitor, except where such employment or services do not relate in any manner to the Business;

(B) acquire a financial interest in, or otherwise become actively involved with, any Person engaged in the Business, directly or indirectly, as an individual, partner, shareholder, officer, director, principal, agent, trustee or consultant; or

(C) intentionally and adversely interfere with, or attempt to adversely interfere with, business relationships between the members of the Restricted Group and any of their clients, customers, suppliers, partners, members or investors.

(iii) Notwithstanding anything to the contrary in this Agreement, Executive may, directly or indirectly own, solely as an investment, securities of any Person engaged in a Business (including, without limitation, a Core Competitor) which are publicly traded on a national or regional stock exchange or on the over-the-counter market if Executive (i) is not a controlling person of, or a member of a group which controls, such person and (ii) does not, directly or indirectly, own 2% or more of any class of securities of such Person.

(b) Non-Solicitation . During Executive's employment hereunder and the Restricted Period, Executive will not, whether on Executive's own behalf or on behalf of or in conjunction with any Person, directly or indirectly:

(i) solicit or encourage any employee of the Restricted Group to leave the employment of the Restricted Group;

(ii) hire any executive-level employee who was employed by the Restricted Group as of the date of Executive's termination of employment with the Company or who left the employment of the Restricted Group coincident with, or within one year prior to or one year after, the date of Executive's termination of employment with the Company; or

(iii) encourage any material consultant of the Restricted Group to cease working with the Restricted Group.

(iv) For purposes of this Agreement:

(A) " Restricted Group " shall mean, collectively, the Company and its subsidiaries and, to the extent engaged in the Business, their respective Affiliates (including The Blackstone Group L.P. and its Affiliates).

(B) " Business " shall mean (1) origination, installation, or monitoring services related to residential or commercial security, life-safety, energy management or home automation services, (2) installation or servicing of residential or commercial solar panels or sale of electricity generated by solar panels, (3) design, engineering or manufacturing of technology or products related to residential or commercial security, life-safety, energy management or home automation services and/or (4) provision of wireless voice or data services, including internet, into the home.

(C) " Core Competitor " shall mean The ADT Corporation, Tyco Integrated Security, Protection 1, Inc., Protect America, Inc., Stanley Security Solutions, Inc., Vector Security, Inc., Slomins, Inc., Monitronics International, Inc., Life Alert, Comcast Corporation, Time Warner Inc., AT&T Inc., Verizon Communications, Inc., DISH Network Corp., DIRECTV, JAB Wireless, Inc., Clearwire Corporation, CenturyLink, Inc., Cox Communication, Inc. and any of their respective Affiliates and current or future dealers, and Sungevity, Inc., RPS, Sunrun Inc., Solar City Corporation, Clean Power Finance, SunPower Corporation, Corbin Solar Solutions LLC, Galkos Construction, Inc., Zing Solar, Terrawatt, Inc., and any of their respective affiliates or current or future dealers.

(c) During the Restricted Period, Executive agrees not to make, or cause any other person to make, any communication that is intended to criticize or disparage, or has the effect of criticizing or disparaging, the Company or any of its affiliates, agents or advisors (or any of its or their respective employees, officers or directors (it being understood that comments made in Executive's good faith performance of his duties hereunder shall not be deemed disparaging or defamatory for purposes of this Agreement).

(d) It is expressly understood and agreed that although Executive and the Company consider the restrictions contained in this Section 6 to be reasonable, if a final judicial determination is made by a court of competent jurisdiction that the time or territory or any other restriction contained in this Section 6 is an unenforceable restriction against Executive, the provisions of this Agreement shall not be rendered void but shall be deemed amended to apply as to such maximum time and territory and to such maximum extent as such court may judicially determine or indicate to be enforceable. Alternatively, if any court of competent jurisdiction finds that any restriction contained in this Section 6 is unenforceable, and such restriction cannot be amended so as to make it enforceable, such finding shall not affect the enforceability of any of the other restrictions contained herein

(e) The period of time during which the provisions of this Section 6 shall be in effect shall be extended by the length of time during which Executive is in breach of the terms hereof as determined by any court of competent jurisdiction on the Company's application for injunctive relief.

(f) The provisions of this Section 6 shall survive the termination of Executive's employment for any reason, including but not limited to, any termination other than for Cause.

7. Confidentiality; Intellectual Property .

(a) Confidentiality .

(i) Executive will not at any time (whether during or after Executive's employment with the Company), (x) retain or use for the benefit, purposes or account of Executive or any other Person; or (y) disclose, divulge, reveal, communicate, share, transfer or provide access to any Person outside the Company (other than Executive's professional advisers who are bound by confidentiality obligations or otherwise in performance of Executive's duties under Executive's employment and pursuant to customary industry practice), any non-public, proprietary or confidential information – including, without limitation, trade secrets, know-how, research and development, software, databases, inventions, processes, formulae, technology, designs and other intellectual property, information concerning finances, investments, profits, pricing, costs, products, services, vendors, customers, clients, partners, investors, personnel, compensation, recruiting, training, advertising, sales, marketing, promotions, government and regulatory activities and approvals – concerning the past, current or future business, activities and operations of the Company, its subsidiaries or Affiliates and/or any third party that has disclosed or provided any of same to the Company on a confidential basis (" Confidential Information ") without the prior written authorization of the Board.

(ii) "Confidential Information" shall not include any information that is (a) generally known to the industry or the public other than as a result of Executive's breach of this covenant; (b) made legitimately available to Executive by a third party without breach of any confidentiality obligation of which Executive has knowledge; or (c) required by law to be disclosed; provided that with respect to subsection (c) Executive shall give prompt written notice to the Company of such requirement, disclose no more information than is so required, and reasonably cooperate with any attempts by the Company to obtain a protective order or similar treatment.

(iii) Except as required by law, Executive will not disclose to anyone, other than Executive's family (it being understood that, in this Agreement, the term "family" refers to Executive, Executive's spouse, children, parents and spouse's parents) and advisors, the existence or contents of this Agreement; provided that Executive may disclose to any prospective future employer the provisions of Sections 6 and 7 of this Agreement. This Section 7(a)(iii) shall terminate if the Company publicly discloses a copy of this Agreement (or, if the Company publicly discloses summaries or excerpts of this Agreement, to the extent so disclosed).

(iv) Upon termination of Executive's employment with the Company for any reason, Executive shall (A) cease and not thereafter commence use of any Confidential Information or intellectual property (including without limitation, any patent, invention, copyright, trade secret, trademark, trade name, logo, domain name or other source indicator) owned or used by the Company, its subsidiaries or affiliates; and (B) immediately destroy, delete, or return to the Company, at the Company's option, all originals and copies in any form or medium (including memoranda, books, papers, plans, computer files, letters and other data) in Executive's possession or control (including any of the foregoing stored or located in Executive's office, home, laptop or other computer, whether or not Company property) that contain Confidential Information, except that Executive may retain only those portions of any personal notes, notebooks and diaries that do not contain any Confidential Information.

(b) Intellectual Property .

(i) If Executive creates, invents, designs, develops, contributes to or improves any works of authorship, inventions, intellectual property, materials, documents or other work product (including without limitation, research, reports, software, databases, systems, applications, presentations, textual works, content, or audiovisual materials) (" Works "), either alone or with third parties, at any time during Executive's employment by the Company and within the scope of such employment and/or with the use of any the Company resources (" Company Works "), Executive shall promptly and fully disclose same to the Company and hereby irrevocably assigns, transfers and conveys, to the maximum extent permitted by applicable law, all of Executive's right, title, and interest therein (including rights under patent, industrial property, copyright, trademark, trade secret, unfair competition, other intellectual property laws, and related laws) to the Company to the extent ownership of any such rights does not vest originally in the Company. If Executive creates any written records (in the form of notes, sketches, drawings, or any other tangible form or media) of any Company Works, Executive will keep and maintain same. The records will be available to and remain the sole property and intellectual property of the Company at all times.

(ii) Executive shall take all requested actions and execute all requested documents (including any licenses or assignments required by a government contract) at the Company's expense (but without further remuneration) to assist the Company in validating, maintaining, protecting, enforcing, perfecting, recording, patenting or registering any of the Company's rights in the Company Works.

(iii) Executive shall not improperly use for the benefit of, bring to any premises of, divulge, disclose, communicate, reveal, transfer or provide access to, or share with the Company any confidential, proprietary or non-public information or intellectual property relating to a former employer or other third party without the prior written permission of such third party. Executive shall comply with all relevant policies and guidelines of the Company that are from time to time previously disclosed to Executive, including regarding the protection of Confidential Information and intellectual property and potential conflicts of interest.

(iv) The provisions of Section 7 hereof shall survive the termination of Executive's employment for any reason (except as otherwise set forth in Section 7(a)(iv) hereof).

8. Specific Performance. Executive acknowledges and agrees that the Company's remedies at law for a breach or threatened breach of any of the provisions of Section 6 and Section 7 of this Agreement would be inadequate and the Company would suffer irreparable damages as a result of such breach or threatened breach. In recognition of this fact, Executive agrees that, in the event of such a breach or threatened breach, in addition to any remedies at law, the Company, without posting any bond, shall be entitled, in addition to any other remedy available at law or equity, to cease making any payments or providing any benefit otherwise required by this Agreement and obtain equitable relief in the form of specific performance, temporary restraining order, temporary or permanent injunction or any other equitable remedy which may then be available. In addition, upon any breach of Section 6 or any material breach of Section 7 of this Agreement, Executive shall promptly return to the Company upon request all cash payments made to Executive pursuant to Section 5 (if any), less any amounts paid by Executive as taxes in respect of such payments (unless such taxes are actually recovered by Executive from the relevant governmental authority, in which case such tax amounts also shall be returned to the Company). Any determination under this Section 8 of whether Executive is in compliance with Section 6 hereof and material compliance with Section 7 hereof shall be determined based solely on the contractual provisions provided therein and the facts and circumstances of Executive's actions without regard to whether the Company could obtain an injunction or other relief under the law of any particular jurisdiction.

9. Miscellaneous.

(a) Indemnification; Directors' and Officers' Insurance. The Company shall indemnify and hold Executive harmless for all acts and omissions occurring during his employment with the Company or service as a member of the Board to the extent provided under the Company's charter, by-laws and applicable law, and shall promptly advance to Executive or Executive's heirs or representatives all damages, costs, liabilities, losses and expenses (including reasonable attorneys' fees and expenses) (collectively, " Expenses ") as a result of any claim, demand, request, investigation, dispute, controversy, threat, discovery request or request for testimony or information (collectively, a " Claim ") or any proceeding (whether civil, criminal, administrative or investigative), or any threatened Claim or proceeding (whether civil, criminal, administrative or investigative), against Executive that arises out of or relates to Executive's service as an officer, director or employee, as the case may be, of the Company, or Executive's service in any such capacity or similar capacity with an affiliate of the Company or other entity at the request of the Company, upon receipt by the Company of a written request with appropriate documentation of such Expenses, and an undertaking by Executive to repay the amount advanced if it shall ultimately be determined that Executive is not entitled to be indemnified by the Company against such Expenses. During the Employment Term and for a term of six years thereafter, the Company, or any successor to the Company, shall purchase and maintain, at its own expense, directors and officers liability insurance providing coverage for Executive in the same amount as for members of the Board.

(b) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Utah, without regard to conflicts of laws principles thereof.

(c) Jurisdiction; Venue. Except as otherwise provided in Section 8 in connection with equitable remedies, each of the parties hereto hereby irrevocably submits to the exclusive jurisdiction of any federal or state court sitting in the Utah over any suit, action or proceeding arising out of or relating to this Agreement and each of the parties agrees that any action relating in any way to this Agreement must be commenced only in the courts of the State of Utah, federal or state. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted or not prohibited by law, any objection which it may now or hereafter have to the laying of the venue of any such suit, action or proceeding brought in such a court and any claim that any such suit, action or proceeding brought in such a court has been brought in an inconvenient forum. Each of the parties hereto hereby irrevocably consents to the service of process in any suit, action or proceeding by sending the same by certified mail, return receipt requested, or by recognized overnight courier service, to the address of such party set forth in Section 9(j).

(d) Entire Agreement; Amendments. This Agreement (including, without limitation, the schedules and exhibits attached hereto) contains the entire understanding of the parties with respect to the employment of Executive by the Company, and supersedes all prior agreements and understandings (including verbal agreements) between Executive and the Company and/or its current or former affiliates regarding the terms and conditions of Executive's employment with the Company and/or its current or former affiliates. There are no restrictions, agreements, promises, warranties, covenants or undertakings between the parties with respect to the subject matter herein other than those expressly set forth herein. This Agreement (including, without limitation, the schedules and exhibits attached hereto) may not be altered, modified, or amended except by written instrument signed by the parties hereto.

(e) No Waiver. The failure of a party to insist upon strict adherence to any term of this Agreement on any occasion shall not be considered a waiver of such party's rights or deprive such party of the right thereafter to insist upon strict adherence to that term or any other term of this Agreement.

(f) Severability. In the event that any one or more of the provisions of this Agreement shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions of this Agreement shall not be affected thereby.

(g) Assignment. This Agreement, and all of Executive's rights and duties hereunder, shall not be assignable or delegable by Executive. Any purported assignment or delegation by Executive in violation of the foregoing shall be null and void *ab initio* and of no force and effect. This Agreement shall be assigned by the Company to a person or entity which is a successor in interest (" Successor ") to substantially all of the business operations of the Company. Upon such assignment, the rights and obligations of the Company hereunder shall become the rights and obligations of such affiliate or successor person or entity.

(h) Set Off; No Mitigation . Executive shall not be required to mitigate the amount of any payment provided for pursuant to this Agreement by seeking other employment, and such payments shall not be reduced by any compensation or benefits received from any subsequent employer or other endeavor. Any amounts due under Section 5 of this Agreement are considered reasonable by the Company and are not in the nature of a penalty.

(i) Compliance with Code Section 409A .

(i) The intent of the parties is that payments and benefits under this Agreement comply with or be exempt from Code Section 409A and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance therewith. If any provision of this Agreement (or of any award of compensation, including equity compensation or benefits) would cause Executive to incur any additional tax or interest under Code Section 409A, the Company shall, after consulting with and receiving the approval of Executive, reform such provision in a manner intended to avoid the incurrence by Executive of any such additional tax or interest.

(ii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits that are considered nonqualified deferred compensation under Code Section 409A upon or following a termination of employment unless such termination is also a "separation from service" within the meaning of Code Section 409A, and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment" or like terms shall mean "separation from service." The determination of whether and when a separation from service has occurred for proposes of this Agreement shall be made in accordance with the presumptions set forth in Section 1.409A-1(h) of the Treasury Regulations.

(iii) Any provision of this Agreement to the contrary notwithstanding, if at the time of Executive's separation from service, the Company determines that Executive is a "specified employee," within the meaning of Code Section 409A, then to the extent any payment or benefit that Executive becomes entitled to under this Agreement on account of such separation from service would be considered nonqualified deferred compensation under Code Section 409A, such payment or benefit shall be paid or provided at the date which is the earlier of (i) six (6) months and one day after such separation from service and (ii) the date of Executive's death (the " Delay Period "). Upon the expiration of the Delay Period, all payments and benefits delayed pursuant to this Section 9(i) (whether they would have otherwise been payable in a single sum or in installments in the absence of such delay) shall be paid or provided to Executive in a lump-sum, and any remaining payments and benefits due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein.

(iv) Any reimbursements and in-kind benefits provided under this Agreement that constitute deferred compensation within the meaning of Code Section 409A shall be made or provided in accordance with the requirements of Code Section 409A, including that (A) in no event shall any fees, expenses or other amounts eligible to be reimbursed by the Company under this Agreement be paid later than the last day of the calendar year next following the calendar year in which the applicable fees, expenses or other amounts were incurred; (B) the amount of expenses eligible for reimbursement, or in-kind benefits that the Company is obligated to pay or provide, in any given calendar year shall not affect the expenses that the Company is obligated to reimburse, or the in-kind benefits that the Company is obligated to pay or provide, in any other calendar year, provided that the foregoing clause (B) shall not be violated with regard to expenses reimbursed under any arrangement covered by Section 105(b) of the Code solely because such expenses are subject to a limit related to the period the arrangement is in effect; and (C) Executive's right to have the Company pay or provide such reimbursements and in-kind benefits may not be liquidated or exchanged for any other benefit.

(v) For purposes of Code Section 409A, Executive's right to receive any installment payments shall be treated as a right to receive a series of separate and distinct payments. Whenever a payment under this Agreement specifies a payment period with reference to a number of days (for example, "payment shall be made within thirty (30) days following the date of termination"), the actual date of payment within the specified period shall be within the sole discretion of the Company. In no event may Executive, directly or indirectly, designate the calendar year of any payment to be made under this Agreement, to the extent such payment is subject to Code Section 409A.

(j) Notice . For the purpose of this Agreement, notices and all other communications provided for in the Agreement shall be in writing and shall be deemed to have been duly given when delivered by hand or overnight courier or three days after it has been mailed by United States registered mail, return receipt requested, postage prepaid, addressed to the respective addresses set forth below in this Agreement, or to such other address as either party may have furnished to the other in writing in accordance herewith, except that notice of change of address shall be effective only upon receipt.

If to the Company:

APX Group, Inc.
c/o 313 Acquisition LLC
4931 North 300 West
Provo, Utah 84604
Attention: General Counsel

with a copy (which shall not constitute notice) to:

The Blackstone Group
345 Park Avenue
New York, New York 10154
Attention: Peter Wallace

and

Simpson Thacher & Bartlett LLP
425 Lexington Avenue,
New York, New York 10017
Attention: Gregory T. Grogan

If to Executive:

To the most recent address of Executive set forth in the personnel records of the Company.

(k) Executive Representation . Executive hereby represents to the Company that the execution and delivery of this Agreement by Executive and the Company and the performance by Executive of Executive's duties hereunder shall not constitute a breach of the terms of any employment agreement or other agreement or written policy to which Executive is a party or otherwise bound. Executive hereby further represents that he is not subject to any restrictions on his ability to solicit, hire or engage any employee or other service-provider. Executive agrees that the Company is relying on the foregoing representations in entering into this Agreement and related equity-based award agreements.

(l) Withholding Taxes . The Company may withhold from any amounts payable under this Agreement such Federal, state and local taxes as may be required to be withheld pursuant to any applicable law or regulation.

(m) Counterparts . This Agreement may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

[*Signatures Follow*]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

APX GROUP, INC.

/s/ Alex J. Dunn
By: Alex J. Dunn
Title: President

EXECUTIVE

/s/ Matthew J. Eyring
Matthew J. Eyring

Exhibit I

RELEASE AND WAIVER OF CLAIMS

This Release and Waiver of Claims (" Release ") is entered into and delivered to 313 Acquisition LLC (the " Company ") as of this [●] day of _________, 201[_], by Matt Eyring (the " Executive "). The Executive agrees as follows:

1. The employment relationship between the Executive and the Company and its subsidiaries and affiliates, as applicable, terminated on the [●] day of _______, 201[_] (the " Termination Date ") pursuant to Section [__] of the Employment Agreement between the Company and Executive dated March 8, 2016 (" Employment Agreement ").

2. In consideration of the payments, rights and benefits provided for in Sections 5(d)(ii)(B) and 5(d)(ii)(C) of the Employment Agreement (collectively, as applicable, the " Separation Terms ") and this Release, the sufficiency of which the Executive hereby acknowledges, the Executive, on behalf of himself and his agents, representatives, attorneys, administrators, heirs, executors and assigns (collectively, the " Employee Releasing Parties "), hereby releases and forever discharges the Company Released Parties (as defined below), from all claims, charges, causes of action, obligations, expenses, damages of any kind (including attorneys fees and costs actually incurred) or demands, in law or in equity, whether known or unknown, which may have existed or which may now exist from the beginning of time to the date of this Release, arising from or relating to Executive's employment or termination from employment with the Company or otherwise, including a release of any rights or claims the Executive may have under Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Age Discrimination in Employment Act of 1967, as amended (" ADEA "); the Older Workers Benefit Protection Act; the Americans with Disabilities Act of 1990; the Rehabilitation Act of 1973; the Family and Medical Leave Act of 1993; Section 1981 of the Civil Rights Act of 1866; Section 1985(3) of the Civil Rights Act of 1871; the Employee Retirement Income Security Act of 1974; the Fair Labor Standards Act; any other federal, state or local laws against discrimination; or any other federal, state, or local statute, regulation or common law relating to employment, wages, hours, or any other terms and conditions of employment. This includes a release by the Executive of any and all claims or rights arising under contract (whether written or oral, express or implied), covenant, public policy, tort or otherwise. For purposes hereof, "Company Released Parties" shall mean the Company and any of its past or present employees, agents, insurers, attorneys, administrators, officials, directors, shareholders, divisions, parents, members, subsidiaries, affiliates, predecessors, successors, employee benefit plans, and the sponsors, fiduciaries, or administrators of the Company's employee benefit plans.

3. The Executive acknowledges that the Executive is waiving and releasing rights that the Executive may have under the ADEA and other federal, state and local statutes contract and the common law and that this Release is knowing and voluntary. The Executive and the Company agree that this Release does not apply to any rights or claims that may arise after the date of execution by Executive of this Release. The Executive acknowledges that the consideration given for this Release is in addition to anything of value to which the Executive is already entitled. The Executive further acknowledges that the Executive has been advised by this writing that: (i) the Executive should consult with an attorney prior to executing this Release; (ii) the Executive has up to twenty-one (21) days within which to consider this Release, although the Executive may, at the Executive's discretion, sign and return this Release at an earlier time, in which case the Executive waives all rights to the balance of this twenty-one (21) day review period; and (iii) for a period of 7 days following the execution of this Release in duplicate originals, the Executive may revoke this Release in a writing delivered to the Chairman of the Board of Directors of the Company, and this Release shall not become effective or enforceable until the revocation period has expired.

4. This Release does not release the Company Released Parties from (i) any obligations due to the Executive under the Separation Terms, (ii) any rights Executive has to indemnification by the Company and to directors and officers liability insurance coverage, (iii) any vested rights the Executive has under the Company's employee pension benefit and group healthcare benefit

plans as a result of Executive's actual service with the Company, (iv) any fully vested and nonforfeitable rights of the Executive as a shareholder or member of the Company or its affiliates, (v) any rights of the Executive pursuant to any equity or incentive award agreement with the Company, or (vi) any rights which cannot be waived by an employee under applicable law.

5. The Executive represents and warrants that he has not filed any action, complaint, charge, grievance, arbitration or similar proceeding against the Company Released Parties.

6. This Release is not an admission by the Company Released Parties or the Employee Releasing Parties of any wrongdoing, liability or violation of law.

7. The Executive shall continue to be bound by the restrictive covenants contained in the Employment Agreement.

8. This Release shall be governed by and construed in accordance with the laws of the State of New York, without reference to the principles of conflict of laws.

9. Each of the sections contained in this Release shall be enforceable independently of every other section in this Release, and the invalidity or unenforceability of any section shall not invalidate or render unenforceable any other section contained in this Release.

10. **The Executive acknowledges that the Executive has carefully read and understands this Release, that the Executive has the right to consult an attorney with respect to its provisions and that this Release has been entered into knowingly and voluntarily. The Executive acknowledges that no representation, statement, promise, inducement, threat or suggestion has been made by any of the Company Released Parties to influence the Executive to sign this Release except such statements as are expressly set forth herein or in the Employment Agreement.**

Executive has executed this Release as of the day and year first written above.

EXECUTIVE

____
Matt Eyring

Exhibit 12.1

COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

	Successor					Predecessor
	Year Ended December 31,				Period from November 17, through December 31, 2012	Period from January 1, through November 16, 2012
	2016	2015	2014	2013		
	(in thousands)					
Fixed Charges:						
Interest expense	$ 197,965	$ 161,339	$ 147,511	$ 114,476	$ 12,645	$ 106,620
Capitalized interest	5,318	5,047	3,624	2,028	217	1,649
Portion of rental expense which represents interest factor (1)	203,283	166,386	151,135	116,504	12,862	108,269
Total Fixed Charges						
Earnings Available for Fixed Charges:						
Pretax loss from continuing operations	(275,957)	(278,756)	(238,146)	(120,921)	(41,005)	(149,674)
Distributed equity income of affiliated companies	—	—	—	—	216	6
Add: Fixed Charges	203,283	166,386	151,135	116,504	12,862	108,269
Total earnings available for fixed charges	$ (72,674)	$ (112,370)	$ (87,011)	$ (4,417)	$ (27,927)	$ (41,399)
Earnings for the period were insufficient to cover fixed charges by the following amounts:	(275,957)	(278,756)	(238,146)	(120,921)	(40,789)	(149,668)
Ratio of earnings to fixed charges (2)	NM	NM	NM	NM	NM	NM

(1) Represents the portion of rental expense deemed to be attributable to interest
(2) NM - Not meaningful

Exhibit 21.1

Subsidiaries of APX Group, Inc.

Name	Jurisdiction of Incorporation / Organization
313 Aviation, LLC	Utah
Smart Home Pros, Inc.	Utah
Vivint, Inc.	Utah
Vivint Purchasing, LLC	Utah
AP AL LLC	Delaware
IPR LLC	Delaware
Farmington IP LLC	Delaware
Smartrove Inc.	Delaware
Space Monkey, LLC	Delaware
Vivint Firewild, LLC	Delaware
Vivint Funding US LLC	Delaware
Vivint Funding Holdings LLC	Delaware
Vivint Group, Inc.	Delaware
Vivint Servicing, LLC	Delaware
Vivint Solar Licensing, LLC	Delaware
Vivint Wireless, Inc.	Delaware
Vivint Louisiana LLC	Louisiana
Vivint Australia Pty Ltd.	Australia
Vivint Canada, Inc.	Canada
Vivint New Zealand Ltd.	New Zealand
Vivint Canada Servicing, LP	Ontario
Vivint Funding Canada LP	Ontario
Vivint Puerto Rico, LLC	Puerto Rico

Exhibit 31.1

**CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Todd Pedersen, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2016 of APX Group Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 2, 2017

/s/ Todd Pedersen

Todd Pedersen
Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Mark Davies, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2016 of APX Group Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 2, 2017

/s/ Mark Davies

Mark Davies
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of APX Group Holdings, Inc. (the “Company”) on Form 10-K for the year ended December 31, 2016 filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Todd Pedersen, Chief Executive Officer and Director of the Company, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date: March 2, 2017

/s/ Todd Pedersen

Todd Pedersen
Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of APX Group Holdings, Inc. (the “Company”) on Form 10-K for the year ended December 31, 2016 filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Mark Davies, Chief Financial Officer of the Company, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date: March 2, 2017

/s/ Mark Davies

Mark Davies
Chief Financial Officer
(Principal Financial Officer)

Exhibit 99.1

SECTION 13(r) DISCLOSURE

The disclosures reproduced below were initially included in periodic reports filed with the Securities and Exchange Commission by Travelport Worldwide Limited ("Travelport") for its fiscal quarter ended March 31, 2016 and by NCR Corporation ("NCR") for its fiscal year ended December 31, 2016, in each case in accordance with Section 13(r) of the Securities Exchange Act of 1934, as amended. During all or a portion of fiscal 2016, each of Travelport and NCR may be considered to have been affiliates of The Blackstone Group L.P. ("Blackstone"), and, therefore, during such time, also affiliates of APX Group Holdings, Inc. ("APX"). APX did not independently verify or participate in the preparation of any of these disclosures.

Travelport included the following disclosure in its Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2016 :

"Trade Sanctions Disclosure

The following activities are disclosed as required by Section 13(r)(1)(D)(iii) of the Exchange Act.

As part of our global business in the travel industry, we provide certain passenger travel related Travel Commerce Platform and Technology Services to Iran Air. We also provide certain Technology Services to Iran Air Tours. All of these services are either exempt from applicable sanctions prohibitions pursuant to a statutory exemption permitting transactions ordinarily incident to travel or, to the extent not otherwise exempt, specifically licensed by the U.S. Office of Foreign Assets Control. Subject to any changes in the exempt/licensed status of such activities, we intend to continue these business activities, which are directly related to and promote the arrangement of travel for individuals.

The gross revenue and net profit attributable to these activities in the quarter ended March 31, 2016 were approximately $156,000 and $109,000, respectively."

NCR included the following disclosure in its Annual Report on Form 10-K for the fiscal year ended December 31, 2016 :

" **Disclosure Pursuant to Section 13(r)(1)(D)(ii) of the Securities Exchange Act.** Pursuant to Section 13(r)(1)(D)(ii) of the Securities Exchange Act of 1934, as amended, we note that, during the period from January 1, 2016 through April 30, 2016, we continued to maintain a bank account and guarantees at the Commercial Bank of Syria ("CBS"), which was designated as a Specially Designated National pursuant to Executive Order 13382 ("EO 13382") on August 10, 2011. This bank account and the guarantees at CBS were maintained in the normal course of business prior to the listing of CBS pursuant to EO 13382. We note that the last known account balance was approximately $3,468 at April 30, 2016. The bank account did not generate interest from January 1, 2016 through April 30, 2016, and the guarantees did not generate any revenue or profits for the Company. Pursuant to a license granted to the Company by OFAC on January 3, 2013, and subsequent licenses granted on April 29, 2013, July 12, 2013, February 28, 2014, November 12, 2014, and October 24, 2015, the Company had been engaged in winding down its past operations in Syria. The Company's last such license expired on April 30, 2016. In addition, the Company's application to renew its license to transact business with CBS, which was submitted to OFAC on May 18, 2015, was not acted upon prior to the expiration of the Company's last such license. As a result, and in connection with the license expiration, the Company abandoned its remaining property in Syria, which, including the CBS account, was commercially insignificant, and ended the employment of its final two employees in Syria, who had remained employed by the Company to assist with the execution of the Company's wind-down activities pursuant to authority granted by the OFAC licenses. The Company does not intend to engage in any further business activities with CBS."