

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

FORM 10-K

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

For the fiscal year ended December 31, 2021

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: **001-40985**

NextNav Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

**1775 Tysons Blvd., 5th Floor
McLean, VA**

(Address of principal executive offices)

87-0854654

(I.R.S. Employer
Identification No.)

22102

(Zip Code)

Registrant's telephone number, including area code **(800) 775-0982**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value	NN	The Nasdaq Capital Market
Warrants, each to purchase one share of Common Stock	NNAVW	The Nasdaq Capital Market

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 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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Accelerated filer	<input type="checkbox"/>	Emerging growth company	<input checked="" type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The registrant was not a public company at June 30, 2021, which would have been the last business day of the registrant's most recently completed second fiscal quarter. Therefore, it cannot calculate the aggregate market value of common stock held by non-affiliates at such date.

There were 95,553,763 shares of the registrant's common stock outstanding as of March 18, 2022.

Documents Incorporated by Reference

Portions of the registrant's Definitive Proxy Statement relating to the 2022 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year ended December 31, 2021, are incorporated by reference into Part III of this Annual Report on Form 10-K.



NEXTRAV INC.

Annual Report on Form 10-K for the Fiscal Year ended December 31, 2021

Table of Contents

	Page
Cautionary Note Regarding Forward-looking Statements	ii
Risk Factors Summary	iii
<u>PART I</u>	
Item 1. Business	1
Item 1A. Risk Factors	16
Item 1B. Unresolved Staff Comments	32
Item 2. Properties	32
Item 3. Legal Proceedings	32
Item 4. Mine Safety Disclosures	32
<u>PART II</u>	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	33
Item 6. Reserved	34
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	34
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	43
Item 8. Financial Statements and Supplementary Data	44
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	44
Item 9A. Controls and Procedures	44
Item 9B. Other Information	45
Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	45
<u>PART III</u>	
Item 10. Directors, Executive Officers and Corporate Governance	46
Item 11. Executive Compensation	46
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	46
Item 13. Certain Relationships and Related Transactions, and Director Independence	46
Item 14. Principal Accountant Fees and Services	46
<u>PART IV</u>	
Item 15. Exhibits and Financial Statement Schedules	47
Item 16. Form 10-K Summary	48
<u>SIGNATURES</u>	

Unless the context otherwise requires, all references in this Annual Report on Form 10-K to “NextNav,” the “Company,” “we,” “us,” and “our” include NextNav Inc. and its subsidiaries.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements include, but are not limited to, statements regarding our management team’s expectations, hopes, beliefs, intentions or strategies regarding the future, projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, and are not guarantees of future performance. The words “may,” “will,” “anticipate,” “believe,” “expect,” “continue,” “could,” “estimate,” “future,” “expect,” “intends,” “might,” “plan,” “possible,” “potential,” “aim,” “strive,” “predict,” “project,” “should,” “would” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements in this Annual Report on Form 10-K include, among other things, statements about:

1. expectations regarding our strategies and future financial performance, including our future business plans or objectives, expected functionality of our geolocation services, anticipated timing and level of deployment of our services, anticipated demand and acceptance of our services, prospective performance and commercial opportunities and competitors, the timing of obtaining regulatory approvals, ability to finance our research and development activities, commercial partnership acquisition and retention, products and services, pricing, marketing plans, operating expenses, market trends, revenue, liquidity, cash flows and uses of cash, capital expenditures, and our ability to invest in growth initiatives;
2. our ability to recognize the anticipated benefits of the Business Combination (as defined below), which may be affected by, among other things, competition, and the ability of the combined business to grow and manage growth profitably;
3. factors relating to our future operations, projected capital resources and financial position, estimated revenue and losses, projected costs and capital expenditures, prospects and plans;
4. projections of market growth and size, including the level of market acceptance for our services;
5. our ability to adequately protect key intellectual property rights or proprietary technology;
6. our ability to maintain our Location and Monitoring Service (“LMS”) licenses and obtain additional LMS licenses as necessary;
7. our ability to maintain adequate operational financial resources or raise additional capital or generate sufficient cash flows;
8. our ability to develop and maintain effective internal controls;
9. our success in recruiting and/or retaining officers, key employees or directors;
10. expansion plans and opportunities;
11. costs related to being a public company;
12. our ability to maintain the listing of our securities on Nasdaq; and
13. the outcome of any known and unknown litigation and regulatory proceedings.

We have included important factors in the cautionary statements included in this Annual Report on Form 10-K, particularly in “Item 1A. Risk Factors”, that could cause actual results or events to differ materially from the forward-looking statements that we make. You should read this Annual Report on Form 10-K and the documents that we have filed as exhibits to this Annual Report on Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. These forward-looking statements are based on information available as of the date of this annual report on Form 10-K, and current expectations, forecasts and assumptions, and involve a number of judgments, risks and uncertainties. Accordingly, forward-looking statements should not be relied upon as representing our views as of any subsequent date, and we do not undertake any obligation to update or revise any forward-looking statements to reflect events or circumstances after the date they were made, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

Risk Factors Summary

The following summarizes the principal factors that make an investment in us speculative or risky, all of which are more fully described in “Item 1A. Risk Factors” below. This summary should be read in conjunction with “Item 1A. Risk Factors” and should not be relied upon as an exhaustive summary of the material risks facing our business.

Risks Related to the Business and the Industry

- The effects of the ongoing COVID-19 pandemic have had and could continue to have material adverse impacts on our business, results of operations, cash flows, and financial position.
- We have incurred significant losses since inception. We expect to incur losses in the future and may not be able to achieve or maintain profitability.
- Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.
- Pinnacle z-axis is a brand new capability, and adoption may be delayed by our potential customers’ unfamiliarity with 3D position, a lack of ecosystem support (e.g., specific device sensors, 3D routing) and/or other factors.
- The majority of our business plan depends on selling services that must be licensed and integrated into our customers’ platforms for sales to end users, and we typically only generate revenue from the arrangements when end users access those third-party platforms and utilize our services.
- We face intense competition in our market, especially from competitors that offer their location services for free, which could make it difficult for us to acquire and retain customers and end users.
- Our Pinnacle network infrastructure is dependent on a hosting arrangement with AT&T.
- We rely, in part, on AT&T for distribution of our services to FirstNet[®] customers.
- Our services may not be adopted by additional wireless carriers for E911.
- Mass-market adoption of our TerraPoiNT service will require integration into smartphones, which requires both hardware and software.
- We rely on a limited number of key vendors for timely supply of components or services for our service offerings. If these vendors experience problems, we could fail to obtain the equipment and services we require to operate our business successfully.
- Our services are available within defined network footprints, and if we are not able to deploy new infrastructure, we will not be able to expand our service area.
- There is no guarantee that TerraPoiNT service will be sold to commercial users or achieve broad commercial support in the United States or internationally.
- Natural or man-made disasters, including cyber security attacks, or terrorist attacks could have an adverse effect on our business.
- The failure to successfully obtain, maintain and enforce intellectual property rights and defend against challenges to our intellectual property rights could adversely affect us.
- Our results could be adversely impacted as a result of increased inflation and supply chain pressure impacting our or our vendors’ expenses and availability of resources and components.

Risks Related to Legal and Regulatory Matters

- Our business depends on access to radio spectrum to provide certain of our location services and access to such spectrum on a nationwide basis is not a certainty.
- Our FCC licenses authorize the use of radio frequencies that are shared with other radio services, which could result in harmful interference and impairment to our use of our licensed spectrum.
- Our LMS licenses are subject to renewal by the FCC and no certainty exists that we will be able to secure ongoing renewals of our licenses.
- Our LMS licenses are subject to end-of-term build-out requirements maintained by the FCC and no certainty exists that we will be able to comply with the build out requirements and retain our licenses.
- Our retention and use of our LMS licenses has been the subject of ongoing objections by third parties that could result in the revocation or non-renewal of our LMS licenses.
- A portion of our business plan targets government customers, which subjects us to risks, including early termination, audits, investigations, sanctions and penalties.

- We and our service providers collect, process, transmit, and store personal information, which creates legal obligations and may give rise to additional costs and liability. Failure to comply with federal, state and foreign laws and regulations relating to privacy and data protection could adversely affect our business and its financial condition.
- Our business is subject to a wide variety of additional extensive and evolving government laws and regulations. Failure to comply with such laws and regulations could have a material adverse effect on our business.
- We are subject to stringent U.S. export control and economic sanctions laws and regulations. Unfavorable changes in these laws and regulations or U.S. government licensing policies, our failure to secure timely U.S. government authorizations under these laws and regulations, or our failure to comply with these laws and regulations could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to our Common Stock

- If we issue and sell additional shares of our Common Stock in the future, our existing stockholders will be diluted and our stock price could fall.
- Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.
- We are subject to the reporting requirements of federal securities laws, compliance with which involves significant time, expense and expertise, including maintaining adequate internal controls over financial reporting.
- We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.
- Certain of our Warrants are exercisable, which could increase the number of shares eligible for future resale in the public market and result in dilution to our stockholders.
- A significant portion of our total outstanding shares of our Common Stock (or shares of our Common Stock that may be issued in the future pursuant to the exercise of Warrants) are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our Common Stock to drop significantly, even if our business is doing well.
- If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

PART I

Item 1. Business.

Overview

We are the market leader in delivering next generation positioning, navigation and timing (“PNT”) solutions that overcome the limitations of existing space-based global positioning system (“GPS”). The impact of GPS on the U.S. economy is approaching \$1 trillion annually, according to a NextNav extrapolation of our data from a National Institute of Standards and Technology (“NIST”) sponsored study conducted by RTI International (“RTI”). Based on the increasing reliance on PNT across many facets of the global economy, the world increasingly requires more accurate and resilient PNT capabilities. Higher performance will continue to expand the reach and value of PNT solutions, while resilience is essential to protect the vast economic activity that is reliant on GPS. We are targeting a global addressable market that is greater than \$100 billion.

We currently deliver differentiated PNT solutions through our network-based Pinnacle and TerraPoiNT solutions. Our Pinnacle system provides “floor-level” altitude service to any device with a barometric pressure sensor, including most off-the-shelf Android and iOS smartphones. This service enables full 3D location at national scale for the first time. Public safety, autonomous vehicles, electric vertical takeoff and landing vehicles (“eVTOLs”), unmanned aerial vehicles (“UAVs”), and the app economy all require precise 3D location solutions. Paramedics need to know which apartment a 911 call originated from, ride hailing and delivery apps need to know precisely where a customer is standing and game developers need precise 3D location data to deliver next generation augmented reality experiences.

In early 2021, we launched our Pinnacle service in approximately 4,400 cities and towns in the United States, covering over 90% of commercial properties with structures that exceed three stories. The Pinnacle network is being used for public safety by FirstNet®, built with AT&T Services, Inc. (“AT&T”), the first high-speed, nationwide wireless broadband network dedicated to public safety, and we have contracts with a growing number of commercial apps and app development platforms, including Atlas Earth, Unity Engine, Eco3d, CRG, Qualcomm, and the Unreal Engine. In December 2021, we entered into an agreement with one of the nation’s largest wireless carriers to deliver vertical location for enhanced 911 (“E911”) using our Pinnacle 911 solution for all its customers. We believe that ramp up of customers using our existing Pinnacle network will support material revenue growth over the coming years.

Our TerraPoiNT system is a terrestrial-based, encrypted network designed to overcome the limitations inherent in the space-based nature of GPS, namely a faint, unencrypted signal, which is often unavailable indoors, distorted in urban areas and vulnerable to both jamming and spoofing. TerraPoiNT overcomes these limitations through a network of specialized wide area location transmitters that broadcast an encrypted PNT signal on our licensed 900 MHz spectrum with a signal that is 100,000 times stronger than GPS. Unlike GPS, the TerraPoiNT signal can be reliably received indoors and in urban areas, is difficult to jam, and is difficult to spoof. Further, the TerraPoiNT signal embeds Pinnacle information to provide a full 3D solution. In addition, TerraPoiNT provides redundancy for GPS, which is essential due to the economy’s reliance on GPS for location and precision timing. GPS redundancy is increasingly a U.S. national security priority, and is rising in priority in the European Union, non-EU countries in Eastern Europe and in other parts of the world due to both the demonstrated vulnerability and lack of local control of space-based signals and systems, highlighted by recent events in the Ukraine. Critical infrastructure, including communications networks and power grids, require a reliable GPS signal for accurate timing. A failure of GPS could be catastrophic, and there is no comprehensive, terrestrial backup that is widely deployed today. TerraPoiNT received the highest scores in testing by the U.S. Department of Transportation reported in 2021 regarding potential PNT backup solutions, in each category tested.

As of March 2022, TerraPoiNT is deployed and available, with metro-wide service in San Francisco and select services available in 51 total markets nationally. It is also in use by the National Aeronautics and Space Administration (“NASA”) at its Langley Research Center for drone operations research.

Since the inception of NextNav, LLC in 2007, we have secured valuable Federal Communications Commission (“FCC”) licenses for a contiguous 8 MHz band of 900 MHz spectrum covering approximately 93% of the U.S. population, filed over 120 patents related to our systems and services, and standardized our TerraPoiNT technology in 3GPP, the global telecommunications standards-setting body.

We believe our unique approach to PNT, relying on terrestrial infrastructure deployed at existing wireless tower or antenna locations, provides an unrivaled quality-of-service and would be difficult to replicate.

Our Strategy

We operate primarily as a facilities-based service provider. Our target customers are predominately businesses, including applications developers, and adjacent businesses selling location-based products and systems to end users. We deploy sensor and broadcast network capabilities, and licenses access to our customers for the data generated by our networks. The key elements of our strategy include:

- *Ensure 3D Location is Market Standard.* Our PNT services offer improved accuracy, resiliency and service availability compared to GPS-based services. We have developed our services to be easily integrated into applications, and sold to end users either as part of a standalone application or for intermediate services used as part of a system or application (e.g., software development kits (“SDK”) based products for mass-market apps or the NASA drone system used as part of their aircraft systems). Our pricing plans are designed to encourage usage and adoption, and are tailored to the use case and business operations of our customers. Given the increasing importance of geolocation services to society and economy, we believe that our offerings should become the new standard in geolocation.
- *Commercialize TerraPoiNT.* We anticipate that the expanded availability of our TerraPoiNT system will provide enhanced value to existing customers and open new verticals. We have entered into agreements related to the commercialization of TerraPoiNT in the burgeoning urban air mobility space, and are working with the U.S. Department of Transportation, U.S. Department of Homeland Security and the U.S. Congress to assess the suitability of TerraPoiNT as a national backup capability to GPS. Redundancy to space-based PNT systems is rising in priority in the European Union, non-EU countries in Eastern Europe and in other parts of the world due to both the demonstrated vulnerability and lack of local control of space-based signals and systems, highlighted by recent events in the Ukraine. We also anticipate enterprise, Internet of Things (“IOT”) and critical infrastructure customers for TerraPoiNT, especially those that require either timing or dynamic navigation capabilities, or reliable urban and indoor reception of its signal. This includes industries such as transportation and telecommunications, which rely on position, navigation and timing to provide service and sectors such as the electrical grid which require timing — nearly every segment of the U.S. economy, most of which rely on GPS or GPS-derived services in one form or another.
- *Enable a Suite of Complementary Products.* As the first to market with a scalable 3D location service, we provide or partner with companies to deliver products and services that are adjacent to our basic location service. Our first product supporting 3D location is our altimeter software bundled with our SDK that enables a quick reference to a user’s relative height. We anticipate building additional tools and capabilities to improve access and usability to application developers to both accelerate adoption and the use of full 3D location.
- *Enhance Adoption, Distribution and Scale with Strategic Partners.* We launched our services after securing our strategic agreement with AT&T to deploy the Pinnacle altitude network and to begin offering services to public safety customers. This relationship provided us with a platform to offer a nationwide service capability and to deliver a crucial situational awareness capability to public safety customers as part of AT&T’s FirstNet[®] operations. Our public safety presence is supported by our own marketing, awareness built through AT&T’s marketing campaigns and its presence on the FirstNet[®] API Catalog.
- *Expand the use of our service for E911 in the U.S.* In October 2021, we entered into an agreement with Qualcomm to make our Pinnacle software and services available with the Qualcomm Location Suite, which will make it easier for device vendors to integrate vertical location capabilities into existing carrier E911 infrastructure. In December 2021, we entered into an agreement with one of the nation’s largest wireless carriers to deliver vertical location for E911, using our Pinnacle 911 solution for its customers. We believe that our service may be attractive to other wireless carriers based on our high performance, system availability and FCC requirements for wireless carriers to provide accurate vertical location to first responders during E911 calls in 2022.

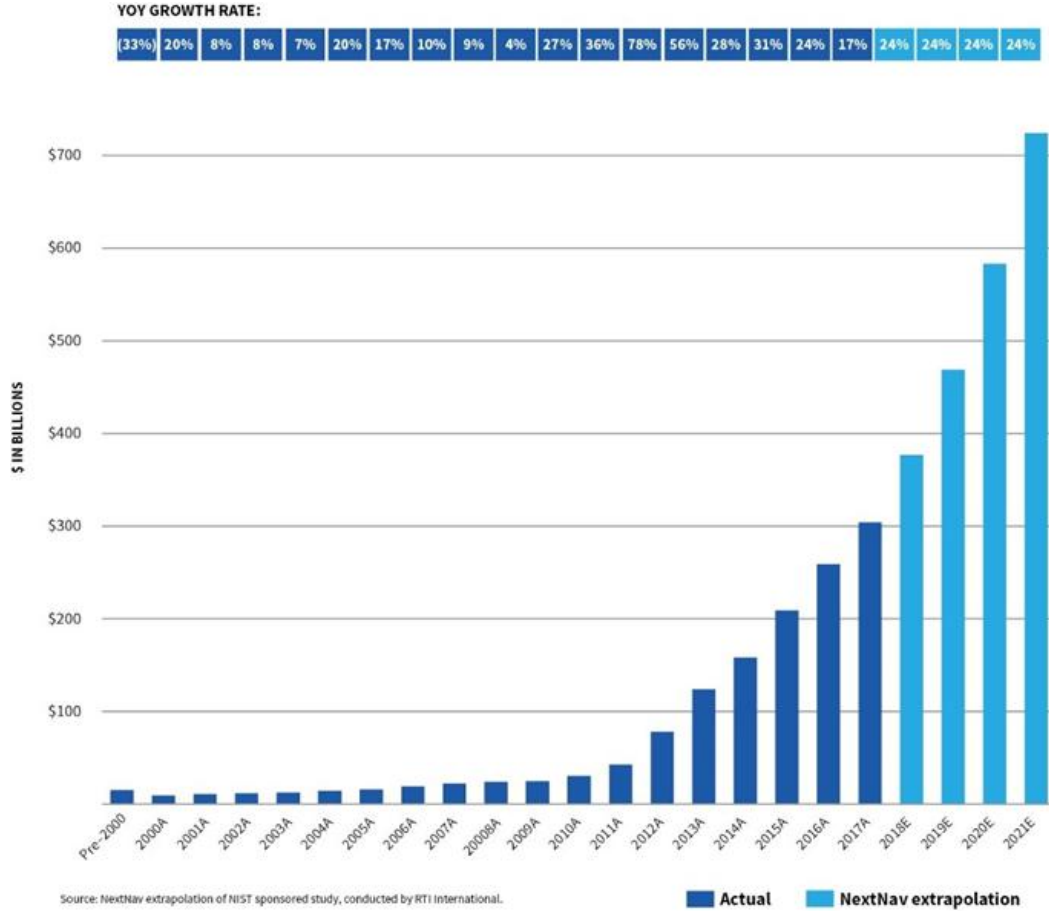
We have received a Mega Grant from Epic Games to build a plug-in for its software to run with the Unreal Engine, which we launched in August 2021, and have become a “Unity Verified Solution” allowing users to integrate 3D experiences into any application built with Unity. Separately, we have joined the Amazon AWS Partner Program, providing potential access to up to 2 million AWS customers, and plan to join the AWS Marketplace to broaden the distribution of our capabilities directly through Amazon. Through our relationship with Infillion, our services may be distributed to up to 1,800 mobile applications as part of Infillion’s service platform. We have a commercial agreement to integrate our Pinnacle software into Atlas: Earth, a game that will deliver an experience built around the real environments of its users. These business relationships are important components to the expansion of our business, and illustrative of our strategy to achieve distribution scale for our products and services.

- *Global Expansion.* In pursuit of our vision for our services to form the standard for global PNT, we have commenced distribution of our services outside of the United States. We are focused on working with partners that can bring local scale as well as access to local authorities responsible for spectrum allocation and national critical infrastructure. Our joint venture in Japan, MetCom, backed by Sony and Kyocera, is emblematic of this approach. MetCom has access to significant local facilities to host our Pinnacle and TerraPoiNT infrastructure, and has secured initial access to the required spectrum resources from the Japanese government for TerraPoiNT operations. We are also in discussions with multiple parties in Europe and the Middle East about bringing our services to those geographic areas.

Industry Background

PNT services are used in nearly every facet of our economy. Cellular and electrical distribution systems depend on GPS-based timing, the mobile app economy relies on location to create innovative services and to drive data and advertising revenue, and public safety and E911 saves lives every day with the use of location services.

GPS has powered the global economy for nearly 40 years. Without high-precision timing from GPS, cellular systems would quickly fail and the distribution of electricity would be impacted, while GPS-based location powers everything from aviation and wireless 911 location to the mobile app economy. Based on research performed for NIST by RTI in 2019, for example, GPS alone is calculated to have provided nearly \$1.4 trillion to the U.S. economy between 1984 and 2017, with nearly a quarter of that value, exceeding \$300 billion, delivered in the last year of their analysis. Applying the average 2015-2017 growth rate from the NIST RTI analysis implies that the 2021 domestic value provided by GPS was approximately \$700 billion.



GPS has inherent limitations due to its faint signal and the geometry of the orbital satellites especially near the Earth's surface. This results in poor performance, especially in urban environments, indoors, and other locations where precise altitude determination is essential. The increasing demand for location services has resulted in the development of a number of supplements and alternatives to traditional GPS.

NextNav Market Opportunity

We believe that the market opportunity for our services is significant, with a total addressable market of over \$50 billion in the United States and over \$100 billion globally. Nearly every segment of the global economy relies on geolocation or high-precision timing, directly or indirectly, and in general those services are either: (a) expensive; (b) of limited performance; or (c) are derived only from GPS or global navigation satellite system ("GNSS"), and suffer from the limitations and vulnerabilities of those services.

We have divided the broad application of our services into five major verticals:

- 1) mission critical public safety;
- 2) mass market, mobile apps, and data analytics;
- 3) eVTOLs, UAVs and autonomous vehicles;
- 4) IOT and critical infrastructure; and
- 5) global expansion.

Mission Critical Public Safety

Our solutions are expected to provide valuable services in the public safety market. Our Pinnacle service is currently being used by first responders enabling them to more accurately locate a user with our 3D location services. The expected launch of our service for E911 callers will provide more accurate information about callers' locations during a wireless 911 call. When TerraPoiNT becomes broadly available, it is expected to provide significant additional value to first responders.

Based on information from the Bureau of Labor Statistics and the National Fire Protection Agency, we believe there are approximately 10 million primary first responders, extended primary first responders and non-military federal employees addressable by FirstNet[®]. We believe that these potential customers represent a total addressable market of approximately \$1.2 billion.

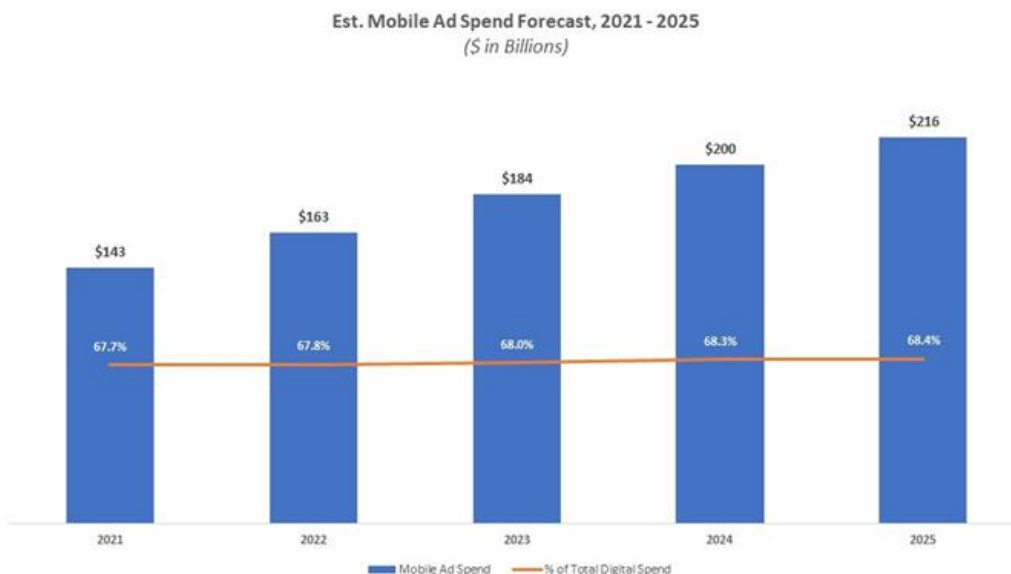
According to the National Emergency Number Association (NENA), E911, which is a FCC required service provided by telecommunications carriers to their subscribers, is dialed approximately 240 million times each year as citizens seek to summon aid for emergencies, including medical emergencies, fires and other incidents. Because FCC rules require E911 services to convey the caller's telephone number and detailed location information to emergency responders, geolocation is an essential element of emergency response. Currently wireless customers pay through their wireless carrier approximately \$0.70 per month, depending on the jurisdiction in which they reside, into state and local E911 pools. A vast majority of those fees collected are directed towards E911 call center equipment. Based on a state-by-state review of E911 and other regulatory fees collected by wireless carriers we estimate a total addressable market for E911 location services in the United States of approximately \$2.3 billion.

Based on an existing FCC order, we expect wireless carriers to have to provide altitude information along with horizontal location information with E911 calls. We have the opportunity to sell our services to wireless carriers to satisfy their regulatory obligations and improve the safety of their customers, and offer certain related services to Public Safety Answering Points to enhance the usability of E911 location services directly and in partnership with other service providers.

Mass Market, Mobile Apps, and Data Analytics

The mobile app economy relies on the availability of location data for direct services to consumers, emerging augmented reality applications and for advertising, marketing and analytics-driven monetization. Mobile advertising in the United States alone is projected by eMarketer to reach nearly \$216 billion by 2025, from approximately \$143 billion in 2021, and according to customer discussions approximately 40% of ad inventory is location-enabled.

Mobile Ad Spending



Source: eMarketer, “Mobile Ad Spending, US 2021-2025,” October 2021

Beyond mobile advertising, mobile applications use location services to enable a wide range of capabilities. According to Google, one-third, or approximately 1 million out of 3 million, apps on the Google Play Store use location. In 2019, nearly \$1 billion was spent in app stores on approximately 10,000 applications hosting at least one direct location services software development kit (“SDK”) (e.g., a mapping SDK and SDKs to enhance user experiences in venues), a small subset of the total apps using location, according to Apptopia data.

Mobile gaming also increasingly relies on location. One example is Niantic’s *Pokemon Go*™, the location-based game that captured national attention in 2016 and continues to be the leading mobile game by revenue. *Pokemon Go*™ generated over \$3 billion in revenue between 2016 and 2019 according to SensorTower research. According to Statista research, this augmented reality trend is expected to accelerate, from approximately 10% of mobile gaming revenue in 2020 to 75% in 2025, or approximately \$7.5 billion in annual spend on augmented reality titles.

Data gathered from mass-market applications is also utilized for analytics, including foot-traffic and related analysis. Based on customer interactions and internal analysis, we believe that the total addressable market value of location-enabled analytics data and reports exceeds \$6 billion.

Finally, mCommerce in the U.S. is expected to reach nearly \$700 billion in 2025 according to eMarketer, growing at a compound annual growth rate (“CAGR”) of approximately 16% and is expected to result in significant online-to-offline and related opportunities.

Collectively, we believe that the total addressable market for the mass-market segment in the United States is approximately \$24 billion, and is characterized by multiple high-growth sectors.

eVTOLs, UAVs and Autonomous Vehicles

eVTOLs, UAVs and autonomous vehicles require reliable, accurate location data for navigation and timing services for control system synchronization.

Based on discussions with potential customers, including leading urban air mobility (“UAM”) providers, we believe that our Pinnacle service will provide a superior altitude or pressure reference both to airframe, autopilot and autonomous systems providers, and to air traffic control and air data providers. We believe that, when deployed broadly, our TerraPoiNT service will provide a resilient, supplementary signal for urban navigation, landing and takeoff. We anticipate selling our services through a mix of per vehicle, monthly recurring and per-usage access fees.

According to a study by Booz Allen Hamilton in September 2019, the infrastructure-constrained UAM market in the United States could result in 1 million eVTOL trips per day. With this volume, which requires approximately 80,000 eVTOLs to be in operation, We believe that the value of enhanced navigation and air traffic control could result in an addressable market of nearly \$4 billion per year.

For autonomous vehicles, sensor-based approaches that do not incorporate reliable, independent location references are challenged in poor weather, ambiguous conditions, and GPS is vulnerable especially in urban environments.

We have estimated the total addressable market in the United States for autonomous vehicle systems to be over \$6 billion by 2030, based on research published by the Gartner Group and McKinsey, with over 5 million fully autonomous vehicles on the road. We believe that each of these vehicles is a potential user of our services.

Enterprise, IOT and Critical Infrastructure

Enterprise and IOT services enable connectivity and coordination within a business or governmental agency. These systems enable intelligent machines, devices and fixed or mobile assets to communicate information from the machine, device, or fixed or mobile asset to and from back-office information systems of businesses and government agencies, as applicable, that track, monitor, control and communicate with them. Location and timing services are a critical element of these systems, and apply to a wide range of use cases including asset tracking, inventory management, patient monitoring in healthcare, people and pet tracking, smart grid applications, smart parking applications, and health and well-being-oriented wearables, among others.

According to ABI Research's "IOT Market Tracker," as of the first quarter of 2018 there are expected to be nearly 1.3 billion connected devices in this sector by 2024, resulting in over \$10 billion in service value in the United States – excluding equipment and data connectivity, and other enterprise and IOT applications. The number of devices in these areas is expected to grow at a CAGR of nearly 70% between 2020 and 2026, while addressable service revenue is expected to grow at a CAGR of 53% over the same period.

We also believe that there is a significant market for our services on a private network basis, at ex-urban college campuses and industrial facilities. We believe the total addressable market in enterprise and IOT in the United States is over \$10 billion per year and growing rapidly.

GPS plays an outsized role in the U.S. economy and our critical infrastructure, including communications networks and power grids, require a reliable GPS signal for accurate timing. Given its importance, the U.S. Federal Government is actively exploring backup solutions to ensure that interruptions to GPS service do not impair the operation of critical infrastructure across various sectors identified by the U.S. Department of Homeland Security as well as other critical consumer sectors.

In a recent report published by the U.S. Department of Transportation, we offered the highest performance among technologies tested for "alternate PNT." We are actively marketing our TerraPoiNT service to the U.S. Federal Government and other firms as a solution to ensure continuity of service across various industries including power generation and transmission, telecommunications, and aviation amongst others.

Global Expansion

We have initiated marketing of our Pinnacle and TerraPoiNT services to potential partners and customers in Canada, East Asia, Europe and the Middle East, with a focus on countries with a high reliance on GPS and location services across highly urbanized populations. We are seeing a similar emphasis globally on PNT services in: (i) mission critical public safety and E911; (ii) mass market, mobile apps, and data analytics; (iii) autonomous vehicles, eVTOLs and UAVs; and (iv) enterprise, IOT and critical infrastructure.

Our services have been piloted in multiple countries already, and in Japan, our joint venture partner MetCom has begun the process of securing a license to operate on the spectrum required for a TerraPoiNT system. We have commenced a pilot program for Pinnacle through our MetCom joint venture as well, and anticipate moving forward with a deployment of Pinnacle services in Japan. MetCom's access to facilities through its primary backers, Sony and Kyocera, create a strong opportunity for a nationwide deployment in Japan.

Based on our analysis, we believe that the international market for its services, excluding China, Russia and Africa, is similar in size to that of the United States, and exceeds \$50 billion.

Our Solutions

Our location systems have been engineered and deployed to provide comprehensive solutions to the limitations and vulnerabilities inherent in GPS-based services. Key GPS limitations include:

- Low signal strength resulting in poor building/indoor penetration, limitations in urban areas;
- Vulnerability to jamming;
- Poor vertical accuracy in most devices, which impacts any service where altitude is relevant (e.g., multi-level structures, vertical separation in low-altitude aviation);
- The primary consumer GPS signal is unencrypted, resulting in poor location security and spoofing;
- Inherent physical vulnerability due to few, isolated transmitters; and
- Single point of failure for a wide range of PNT services.

Isolated solutions to various aspects of the limitations to GPS-based positioning have been deployed, but none carry the primary benefit of GPS, which is high performance across a wide area.

Our current service platforms include Pinnacle, our altitude (z-axis) solution, and TerraPoiNT, which is similar to a terrestrial GPS constellation. Both systems offer metro-wide service, are inherently secure and can provide universal service access to all types of appropriately-equipped devices that use location services.

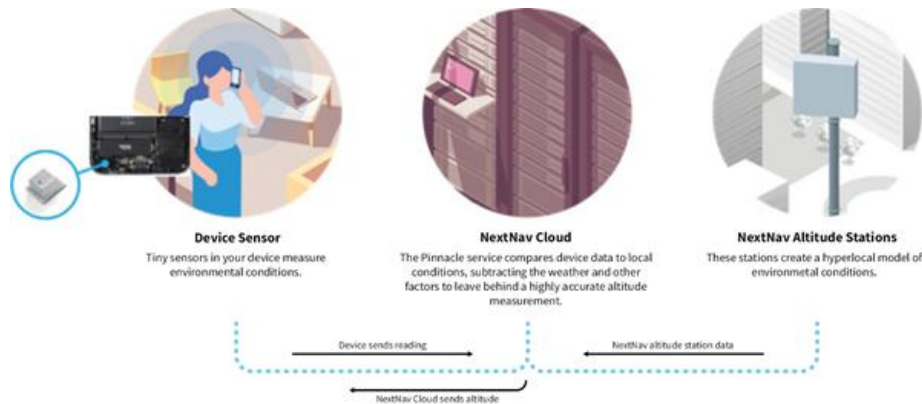
Pinnacle

Pinnacle is our z-axis service, a dedicated vertical positioning network to cover entire metropolitan areas. Pinnacle provides devices equipped with a barometric pressure sensor with the highest quality wide-area altitude service available in the U.S. market today based on a CTIA/FCC “911 Location Test Bed, LLC Report on Stage Z” from 2018. Our service is now available in the top 105 major U.S. markets, which include over 4,400 cities and over 90% of commercial buildings that exceed three stories.

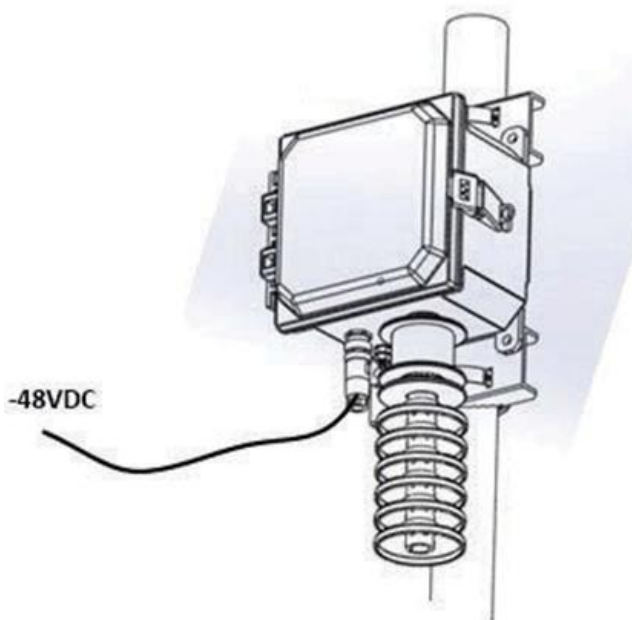
The Pinnacle service is based three primary components:

- 1) An altitude station network, a managed network that consists of equipment designed, manufactured, deployed and operated by us, which measures key environmental variables associated with altitude to enable “floor level” altitude determination;
- 2) Device software, which supports delivery of our z-axis service to mobile apps and other devices, calibration of the pressure sensors on individual devices and receipt of z-axis data from our cloud services platform; and
- 3) A secure cloud services platform, which actively manages our altitude station network, synthesizes data from our network and devices to enable service delivery, and performs access management functions.

The diagram below illustrates the basic process flow of the z-axis service.



Pinnacle works by leveraging the physical principal that barometric pressure declines as altitude increases. By measuring the barometric pressure at a device, and comparing that measurement to the measurements from our network, we can accurately compute the altitude of the sensor. A Pinnacle altitude station is depicted below, and measures approximately 16" x 6" x 4".



Because our Pinnacle technology relies on barometric pressure measurement, it works with the hardware currently used in most mobile phones and tablets. Our Pinnacle service can be delivered to customers in this segment over an applications programming interface ("API") or via an SDK integrated into the relevant applications.

In order to expand access to and use of our Pinnacle services, we work closely with sensor vendors to provide input on key sensor performance factors necessary to produce optimal Pinnacle services. We also recently launched the NextNav Certified™ program. The NextNav Certified™ program allows pressure sensor vendors to perform a set of tests monitored by us. If a vendor meets the criteria for performance while adhering to the test procedures, the vendor can display the NextNav badge on its website and use the endorsement in its marketing to device vendors. In 2021, Bosch Sensortec and InvenSense signed up for the certification program.

TerraPoiNT

TerraPoiNT is our full 3D PNT system, standardized in the global telecommunications standards group, 3GPP Release 13 as Metropolitan Beacon System ("MBS"). The technical specification for the standard MBS signal, or Interface Control Document, can be downloaded from ATIS, the North American affiliate to 3GPP. We license the technology to third-party chipset providers and device vendors typically with no per device royalty.

Positioning, navigation and timing are the core services provided by GPS, and TerraPoiNT can be thought of as a land-based GPS satellite constellation, but with the broadcast transmitters, which we call "beacons." In the United States, this service operates on 8 MHz of contiguous spectrum licensed to us in the 900 MHz band, and covering approximately 93% of the U.S. population (see "Radio Spectrum" for more information about these licenses). We have deployed a wide area, commercial grade TerraPoiNT network in 2 markets in the San Francisco Bay Area and in smaller networks in 49 additional markets throughout the U.S. We are also conducting a pilot program with our joint venture partner MetCom in Japan to support a possible spectrum allocation.

The key elements of the TerraPoiNT service are:

- TerraPoiNT beacons, which include high-precision timing and synchronization capabilities, designed, manufactured in the United States, deployed and operated by us;
- Devices equipped to receive the TerraPoiNT signal, which include an appropriately-designed chip and 900 MHz radio elements; and
- Cloud services platform, which in the case of TerraPoiNT services provides high quality positioning, network management and service access functions to certain types of devices.



The TerraPoiNT beacons each include a high-precision atomic clocking source, and the ability to synchronize locally with nearby beacons by sharing their timing signals. The beacon network is also synchronized to Coordinated Universal Time, the global time standard broadcast by GPS and other sources.

This architecture is naturally resilient to service disruption and significantly more resistant to jamming than GPS. If GPS is disrupted, or completely eliminated, a TerraPoiNT transmitter continues to operate and provide similar service within the TerraPoiNT service area. If one TerraPoiNT beacon is disrupted, service continues from other nearby beacons. Thus, there is both local and national resilience embedded in the basic system design. By operating terrestrially in the 900 MHz band, the TerraPoiNT signal is approximately 100,000 times stronger than GPS, and thus is significantly more difficult to disrupt.

TerraPoiNT was designed for maximum compatibility with GPS and other GNSS receivers. The TerraPoiNT signal can be processed by the hardware used to process GPS and GNSS signals, which has been demonstrated by Broadcom on a version of their 4775 platform and in the recently released GCT GDM7243I. We believe that most, if not all, mass-market GNSS platforms can be similarly configured. This means that the incremental production cost of adding TerraPoiNT to a multi-constellation GNSS integrated circuit is close to zero and the TerraPoiNT capability is typically marketed as a “feature addition” similar to Galileo and other satellite-based constellations.

The expansion of the TerraPoiNT network build-out will require significant investment. However, once it is fully built-out, we expect to incur minimal ongoing maintenance capital expenditures to maintain the network. As a result, our business model provides significant operating leverage as the business scales due to low variable costs to adding incremental network traffic.

Privacy and Data Security

We understand that protection of data and privacy is critically important to the end-users of our services. Our core privacy principles are:

1. *Transparency:* We are transparent about our data practices, and we comply with our privacy policies and agreements so customers and business partners can make informed decisions.

2. *Control*: We have implemented appropriate means for our customers and business partners to control relevant personal and business information.
3. *Security*: We endeavor to protect the data entrusted to us by using strong security protocols.
4. *Compliance*: We respect and comply with local privacy laws, ensuring that privacy-by-design is a core consideration as we develop our products and services.
5. *Consent*: We require appropriate opt-in consent for the provision of all of our services, consistent with the requirements of local law.

Based on industry best-practices, we have implemented multilayered administrative, physical, and technical security measures to protect data. Data access is implemented with the rule of “least privilege,” and we isolate data by service, business function and customer agreement. Our data is encrypted both at rest (locally on the device and on the server) and in transit.

Manufacturing and Network Operations

Manufacturing

Our services are provided in part through equipment we design, generally manufactured under contract by domestic vendors in the United States. The Pinnacle altitude stations were designed to provide a very high performance reference for altitude determination at a low cost. The TerraPoiNT beacons are sophisticated broadcast transmitters that incorporate a very accurate timing system to provide a signal that is similar to that provided by GPS in a terrestrial transmitter. These units are designed to be integrated with our cloud services platform, and managed by software that we designed and created for these systems.

Network Operations

We operate two separate and distinct networks. The Pinnacle network is primarily operated in partnership with AT&T. The Pinnacle altitude stations are co-located at AT&T wireless sites and take advantage of the power systems, including battery backup and generators, at the AT&T sites. We monitor the Pinnacle network health through our network operations center (“NOC”) and work with AT&T to resolve any issues that may arise. Connectivity among the Pinnacle altitude stations, our cloud service platform, and our NOC are enabled through cellular connections, currently provided by AT&T.

We are not required to use AT&T wireless sites for network expansion, and may establish new service areas through independently-acquired site leases or with other partners.

Our TerraPoiNT network is deployed, operated, and maintained by us. The equipment is installed at traditional wireless sites with a mix of towers and rooftops. We monitor the network health through the same NOC as the Pinnacle network and directly dispatch our maintenance contractors if needed.

AT&T Relationship

We have entered into a series of agreements with AT&T to provide our Pinnacle services to FirstNet[®], built with AT&T, and to enable the co-location of elements of our network at AT&T’s wireless sites. By co-locating the Pinnacle equipment at AT&T wireless sites, we were able to accelerate the nationwide deployment of our services and significantly reduce the ongoing operating costs associated with the Pinnacle system.

Our AT&T agreements provide for: (i) AT&T’s marketing and resale of Pinnacle services to FirstNet[®] subscribers and certain pricing requirements for our SDKs based on the quantity of usage, revenue sharing, compliance with data rights and privacy, and support requirements; and (ii) AT&T hosting of Pinnacle equipment for altitude determination at AT&T sites, at no recurring cost to us.

Our obligations to AT&T under these agreements include providing certain equipment to AT&T and an initial payment of \$5 million to AT&T for deployment services for our Pinnacle network. We have provided AT&T with performance assurances and certain intellectual property and transition support rights in the event we are unable to continue providing services to AT&T, have significant service outages, or engage in transactions with certain persons. The parties also entered into escrow arrangements on customary terms for intellectual property storage and verification of the deposited escrow materials in various different escrow “lockers,” which could be accessed by AT&T based on different conditions on which the draw down could be made.

In connection with our AT&T agreements, we also issued warrants exercisable for our equity based on AT&T’s achievement of specified performance goals in deploying our network and including our software on AT&T devices to enable customer adoption. These warrants were fully vested in 2021. See Note 3 to the consolidated financial statements for the year ended December 31, 2021 included elsewhere in this Annual Report on Form 10-K for additional information.

Our equipment hosting agreement with AT&T has a seven year term (subject to earlier termination after three years in certain circumstances), expiring in October 2026, with all site related services to be provided by AT&T at no charge to us for a period which is either three years (ending October 2022) or during AT&T's continued use of the service, whichever is longer. However, if AT&T ceases to use our services after the first three years (i.e. October 2022), then we may terminate the equipment hosting agreement or if we are not in breach of the agreement we may continue the agreement for the remainder of the term and we will have to pay for power and, LTE connectivity and incremental lease costs incurred by AT&T to host the equipment, if any.



Competition and Competitive Advantages

The geolocation industry is highly competitive and we compete with incumbent geolocation services like GPS, Wi-Fi, and cellular signals, augmented by other sensor inputs, as well as other companies who are new entrants into the market seeking to provide a solution to the same needs as we are.

The increasing demand for location services has resulted in the development of a number of supplements and alternatives to traditional GPS. The primary candidates for GPS backup technologies are based on approaches that are significantly different than the technical approach adopted by us. These competitive technologies include:

- *eLORAN*. eLORAN is an advanced version of the World War II-era hyperbolic radio navigation system that was developed in response to the perceived vulnerability of the GNSS systems. eLORAN, like its predecessor uses very low frequencies (in the 100 kHz range), but has an advanced receiver design and transmission characteristics, which increase the accuracy and usefulness of traditional LORAN. These enhancements make it a suitable substitute for GPS. Because eLORAN requires larger antennas and form factor for its receivers, it does not have the same reach as our solutions. It is more suitable for more rural and maritime types of environment.
- *LEO Satellite Systems*. Low Earth orbit (“LEO”) satellite systems offer primarily timing service based on signals transmitted from low earth orbit satellite constellations, transmitted in the L-Band. Because it is in a lower orbit, the LEO signal is much stronger than GPS, allowing for improved reception in urban areas and limited indoor reception. The primary limitation of LEO-based systems is that they remain a satellite-based signal, so the signal is not as strong as a terrestrial-based system. In addition, as an add-on technology, its design is not as flexible as a dedicated system.
- *Commercial Location Systems*. Commercial location systems generally include cellular systems, crowd-sourced systems and locally managed systems. Cellular systems may use localized millimeter wave transmitters in 5G which provides location performance in the immediate vicinity of such 5G transmitters, but the service area of this capability, if deployed, is expected to be limited. Cellular systems are typically used as a fallback when the GPS signal is not available (e.g., indoors), but do not provide the same accuracy that our solutions provide and are ultimately dependent on GPS. Crowd-sourced systems, such as those provided by Google and Apple through APIs in their mobile operation system platforms, rely on the application of machine learning techniques to location information gathered from mobile devices. These systems are “best-efforts systems” that compare GPS measurements to Wi-Fi access point signal strength, cellular signals and other signals gathered from millions of devices to estimate the location of the access points. Crowd-sourced systems vary considerably in accuracy, offer less accurate vertical positioning information and are subject to degradation if there is an issue with local power and local access points. Locally Managed Systems are systems that rely on the management of lower-power signals, managed WiFi, Bluetooth Low Energy, dedicated beacons with large bandwidth requirements and Ultrawideband to provide location services. These systems are centrally managed by the enterprise or a vendor, and typically offer high accuracy and reliability, but are expensive to deploy and manage, offer only limited coverage, are dependent upon local power sources and are usually only available to the entity that deployed them. Most commercial locations systems do not provide an independent timing source, so are limited in their ability to be a viable backup to GPS.

We believe our 3D solutions offer a superior alternative to each of these services. A summary of a report published in 2021 by the U.S. Department of Transportation characterizes and ranks the different available systems.

			TIMING [®]		POSITIONING [®]		TIMING [®]		PNT [™]		TIMING [®]		PNT [™]	
			Performance		Performance		Ground broadcast		Ground broadcast		Broadcast		Broadcast	
			Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
	LHF terrestrial RF	(920-928 MHz)	1	91	1	91	1	82	1	82	1	82	1	82
	LEO commercial S-band	(2483.5-2500 MHz)	-	-	5	38	-	-	-	-	-	-	-	
	iLORAN terrestrial RF	(80-90K Hz)	6	62	-	-	3	66	-	-	4	66	-	
	Fiber optic time service	(white rabbit PTP)	2	87	-	-	-	-	-	-	-	-	-	
	802.11 terrestrial RF	(2.4 GHz)	6	62	3	-	4	-	2	-	5	-	3	
	LEO commercial L-band	(1616-1626.5 MHz)	4	78	2	78	-	-	-	2	80	1	82	
	R-mode terrestrial RF	(283.5-325 KHz)	-	-	-	-	-	-	-	-	-	-	-	
	Fiber optic time transfer	(white rabbit PTP)	3	84	-	-	-	-	-	-	-	-	-	
	802.11 terrestrial RF	(900 MHz, 2.4 & 5 GHz)	-	-	4	-	-	-	-	-	-	-	-	
	UWB & IMU map matching	(3.1-5 GHz)	-	-	5	38	-	-	-	-	-	-	-	
	iLORAN terrestrial RF	(80-90KHz)	5	69	-	-	2	70	-	-	3	70	-	
	MEO government, L-band	(1575, 1227, 1176 MHz)	-	67	-	-	-	-	-	-	-	-	-	

- (1) Weighted score based upon accuracy, availability, product readiness, resilience and security.
- (2) Weighted score based upon accuracy, availability, product readiness, resilience and security.
- (3) Market readiness of Timing Performance using terrestrial RF broadcast.
- (4) Mass market readiness for Position AND Timing using terrestrial RF broadcast.
- (5) Mass market readiness of timing using RF broadcast.
- (6) Mass market readiness for Timing AND Positioning using RF broadcast.

As indicated by the aforementioned results, our solutions offer a differentiated quality over our competitors. We offer significantly better indoor and outdoor performance with receivers that, at production scale, have reduced power consumption and no incremental cost or size difference with GPS. Our system is also significantly more resilient due to its distributed, metro-oriented architecture. We offer better performance and a much stronger signal, due to its terrestrial deployment. It is also more resilient, and has greater design flexibility as a dedicated system as opposed to a feature added to a legacy communications satellite network. Our solutions are not impacted by the density of third party access points, building power, or other issues, and are suitable for any device — from an airplane to a phone to an IOT tracking module.

While various competitors may provide individual elements such as altitude, or timing-only capability, we believe that we provide the only solutions addressing full customer requirements around positioning, navigation and timing. Our solutions are consistently accurate in nearly all environments and conditions. We are well-positioned to compete in our industry based on our core competencies and on the following competitive strengths:

- Physical altitude network that covers over 4,400 U.S. cities and towns and 90% of all commercial building in excess of three stories
- Unique nationwide spectrum asset of 2.4 billion MHz-PoPs, covering 93% of the U.S. population
- Technological innovation
- Highest performing GPS backup solution provider as determined by Department of Transportation
- Global IP portfolio of over 120 patents that covers the core technology, network design and services capability
- Visionary and experienced management team

The combination of these elements puts us in a unique position that cannot be easily replicated. We believe that our collective expertise, coupled with the aforementioned strengths, will allow us to build our business and expand our market opportunity and addressable markets.

Intellectual Property

Our ability to drive innovation in PNT services depends in part upon our ability to protect our core technologies and intellectual property. We rely upon a combination of patent, trademark and trade secret laws in the United States and abroad, as well as license agreements and other contractual protections. In addition, we seek to protect our intellectual property rights through nondisclosure and invention assignment agreements with our employees and consultants and through non-disclosure agreements with business partners and other third parties.

We regularly file applications for patents and have a significant number of patents in the United States and other countries where we do business.

As of December 31, 2021, we had approximately 128 issued patents domestically and internationally, which includes approximately 84 issued patents in the US. In addition, we had approximately 58 pending patent applications, which includes approximately 29 pending patent applications in the U.S.

Sales and Marketing

We sell our solutions directly to customers or through partners. We plan to scale and accelerate our sales and marketing efforts and leverage our recent customer wins to grow our customer base using a global network of sales professionals and distribution relationships. Additionally, we expect existing customers to expand their contracts with us for the deployment of additional services. New service offerings and product features will be introduced over time to increase market share and grow the total addressable market for our services.

Our marketing strategies are focused on supporting sales growth by (i) driving awareness; (ii) developing comprehensive sales and marketing content; and (iii) scaling our efforts with our partners and customers. We drive awareness for our solutions and our customers' successes through communications efforts and participation to leading industry standards.

In addition, our key customers have held webinars, issued press releases and raised the awareness of our service availability with their customers and in the public safety market. For example, AT&T may make further introductions to app developers and other service providers, and we believe that AT&T's adoption and marketing activities are resulting in the broader adoption of our services in the public safety market.

We also seek partnership to offer service internationally. For example, we have formed a joint venture in Japan with MetCom to operate our TerraPoiNT system and Pinnacle system for commercial services, leveraging Sony and Kyocera network infrastructure.

Research and Development

We have significant in-house capabilities in the engineering and development of location-based technology. The services that we provide are largely based on designs and technologies developed by us for our use, some of which we subsequently standardized. We invest significant resources into research and development programs because we believe our ability to maintain and extend our market share depends, in part, on our continuous innovations. These innovations offer a unique value proposition for our customers and differentiate us from our competitors. Our research and development team, which consists of 34 employees, is responsible for the development of both the Pinnacle and TerraPoiNT solutions. Our research and development team consists of talented engineers, scientists, and professionals who have been pioneers in location-based services. Our primary areas of focus in research and development include, but are not limited to:

- Radiolocation position and navigation technologies;
- Precision timing and time distribution;
- Hybrid positioning and timing systems;
- Altitude determination, including barometric altitude determination; and
- Location verification techniques, including techniques to mitigate spoofing.

Human Capital

We pride ourselves on the quality of our world-class team and seek to hire employees dedicated to our strategic mission. Our employees typically have significant experience working with location systems. As of December 31, 2021, we employed 61 full-time employees, based primarily in our headquarters in McLean, Virginia and in our facility in Sunnyvale, California, and one part-time employee. Of our employee base, 15 employees are located outside the U.S. – three in Canada and 12 in India. Over 34 of our employees are engaged in research and development and related functions, and more than half of these employees hold advanced engineering and scientific degrees, including many from the world's top universities.

To date, we have not experienced any work stoppages and consider our relationship with our employees to be good. None of our employees are either represented by a labor union or subject to a collective bargaining agreement.

Facilities

We maintain a distributed workforce with facilities in McLean, Virginia, Sunnyvale, California, Noida, India and Bangalore, India. Our principle executive office is in McLean, Virginia. Our corporate offices in Virginia include finance, regulatory and network deployment functions, while our California facility hosts our technology development functions, among other functions. Our Indian locations house a mix of employees and contractors focused on software development and research and development functions. We may add additional facilities in other locations in the future.

Regulatory

There are government regulations pertaining to our operation, use, and export of our vertical location and PNT solutions, some of which are currently applicable to us and others that will become applicable to us as we expand our operations. As we expand service to additional countries and regions, we will become subject to additional governmental approvals and regulations.

Radio Spectrum

Certain of our services rely on the use of radio communications spectrum, which is regulated in the United States and in most other countries. In the United States, spectrum access is licensed and regulated by the FCC. We hold radio licenses issued by the FCC that authorize the use of 8 MHz of contiguous spectrum in the 900 MHz band covering the vast majority of the population in the United States. These licenses and the FCC rules impose obligations on us regarding the use of this spectrum, including power and operational limits, spectrum sharing and interference restrictions, build out and usage requirements, and a license renewal obligation. We must comply with these requirements in order to retain access and use of its spectrum resources.

Privacy

In developing highly accurate location information, we collect, process, transmit and store personal information, such as certain individual geolocation information, and other personal information relating to its business contacts, personnel, end users, and website visitors. A variety of federal and state laws and regulations govern the collection, use, retention, sharing and security of this information. The U.S. privacy and data protection legal landscape continues to evolve, with California and Virginia having enacted broad-based data privacy and protection legislation and with states and the federal government continuing to consider additional data privacy and protection legislation. As we expand overseas, our joint venture partners will be subject to foreign data privacy and protection legislation, and we may be as well.

Export

Our business plans are based in part on the distribution of its services worldwide. We are required to comply with U.S. export control laws and regulations, including the Export Administration Regulations (“EAR”) administered by the U.S. Department of Commerce’s Bureau of Industry and Security and the foreign asset control regulations administered by the U.S. Department of the Treasury’s Office of Foreign Assets Control. Pursuant to these foreign trade control laws and regulations, we are required, among other things, to (i) determine the proper licensing jurisdiction and export classification of products, software, and technology, (ii) obtain licenses or other forms of U.S. government authorization, or qualify for exceptions, to export our products, software, and technology outside the United States, and (iii) avoid engaging in unauthorized transactions with certain sanctioned countries, territories, entities, and individuals. Violations of applicable export control and sanctions laws and related regulations, which are enforced on a strict liability basis, could result in criminal and administrative penalties, including fines and possible denial of export privileges. U.S. export licenses or license exceptions are required to transfer or make accessible certain of our software source code and technology to our non-U.S. employees. In addition, U.S. export control laws and related licensing policies continue to change, further regulating the export and re-export of our products, services, and technology from the United States and abroad, and increasing our costs and the time necessary to obtain required authorization.

See the section entitled “*Risk Factors — Risks Related to Legal and Regulatory Matters*” for additional information regarding the regulatory requirements applicable to us.

Business Combination

On October 28, 2021 (the “Closing Date”), we consummated the previously announced business combination pursuant to the terms of the Agreement and Plan of Merger, dated as of June 9, 2021, by and among us, Spartacus Acquisition Corporation, a Delaware special purpose acquisition company (“Spartacus”), NextNav Holdings, LLC, a Delaware limited liability company (“Holdings”) and the other parties thereto (the “Business Combination”). As a result of the Business Combination, certain blocker entities formed by Holdings equity holders, Holdings and the various operating subsidiaries of Holdings became our wholly owned subsidiaries, with the equity holders of each of such blocker entities and Holdings and Spartacus’ stockholders becoming our stockholders. In connection with the Business Combination, we changed our name to NextNav Inc. and the Nasdaq ticker symbols for our Common Stock and warrants to “NN” and “NNAVW,” respectively.

Corporate Information and Access to SEC Reports

We were incorporated under the laws of the State of Delaware in May 2021 under the name “Spartacus Acquisition Shelf Corp.” by Spartacus Acquisition Corporation, a Delaware special purpose acquisition company, for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or other similar business combination with one or more businesses or assets. On October 28, 2021, in connection with the closing of the Business Combination, we changed our name to “NextNav Inc.”

Our principal executive office is located at 1775 Tysons Blvd., 5th Floor, McLean, VA 22102. Our telephone number is (800) 775-0982, and our website address is www.nextnav.com. Information contained on, or accessible through, our website is provided for textual reference only and does not constitute part of, and is not incorporated by reference into, this Annual Report on Form 10-K.

Our operating subsidiary, NextNav, LLC (a wholly owned subsidiary of NextNav Holdings, LLC), was formed in October 2007 under the laws of the State of Delaware. In connection with the Business Combination, the various operating subsidiaries of NextNav Holdings, LLC became our wholly owned subsidiaries.

We make our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports, available free of charge in the “Investors” section of our website as soon as reasonably practicable after we file these reports with the SEC. We routinely post these reports, recent news and announcements, financial results and other important information about our business on our website at www.nextnav.com. Information contained on our website is not a part of this Annual Report on Form 10-K.

In addition, the United States Securities and Exchange Commission (“SEC”) maintains an Internet website at www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Item 1A. Risk Factors.

An investment in our securities involves a high degree of risk. You should carefully consider the following risk factors, together with all of the other information included in this Annual Report on Form 10-K, before you decide whether to invest in our securities. We may face additional risks and uncertainties that are not presently known to us, or that we currently deem immaterial, which may also impair our business. The following discussion should be read in connection with the financial statements and notes to the financial statements contained elsewhere in this Annual Report on Form 10-K. You should consult your own financial and legal advisors as to the risks entailed by an investment in our securities and the suitability of investing in our securities in light of your particular circumstances. Some statements in this Annual Report on Form 10-K, including such statements in the following risk factors, constitute forward-looking statements. See the section entitled "Cautionary Note Regarding Forward-Looking Statements."

Risks Related to the Business and the Industry

The effects of the ongoing COVID-19 pandemic have had and could continue to have material adverse impacts on our business, results of operations, cash flows, and financial position.

In March 2020, the World Health Organization declared COVID-19 a pandemic. For two years, the COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains, and created significant volatility and disruption in the financial and capital markets. Given the continued unpredictability pertaining to the COVID-19 pandemic and the corresponding government restrictions and customer behavior, the impact on our business continues to be uncertain and depends on a number of evolving factors that we may not be able to predict or effectively respond to.

The ongoing COVID-19 pandemic has had, and could continue to have, a delaying effect on our services, our customers and service adoption. We have experienced delays in complying with the build-out requirements imposed by the FCC with respect to its LMS licenses due to distribution delays related to the COVID-19 pandemic. The COVID-19 pandemic could limit the ability of suppliers and business partners to perform, including third-party suppliers' ability to provide components and materials. We may also continue to experience an increase in the cost of raw materials. Further, any resurgence of COVID-19 may slow down our customer adoption and expansion of the TerraPoiNT network.

In addition, we have implemented remote working protocols and offered work-issued devices to employees as a result of government guidelines and internal policies that have been put in place in response to the COVID-19 pandemic. The actions of our employees while working remotely may have a greater effect on the security of our systems and the personal data we process, including by increasing the risk of compromise to our systems or data arising from employees' combined personal and private use of devices, accessing our systems or data using wireless networks that we do not control, or the ability to transmit or store company-controlled data outside of our secured network.

The COVID-19 pandemic has also resulted in ongoing volatility in the financial and capital markets. If our access to capital is restricted or associated borrowing costs increase as a result of developments in financial markets relating to the COVID-19 pandemic, our operations and financial condition could be adversely impacted. Any future delays as a result of COVID-19 would delay our ability to roll-out its services, which would negatively impact our business.

We have incurred significant losses since inception. We expect to incur losses in the future and may not be able to achieve or maintain profitability.

We have incurred significant losses since inception and until the second quarter of 2021 had not widely commercially sold its solutions. For the years ended December 31, 2021, 2020 and 2019, we incurred net losses of \$144.7 million, \$137.3 million and \$18.3 million, respectively. Furthermore, any expansion of our TerraPoiNT services will result in increased operating costs. As a result, our losses are expected to continue and we may not achieve profitability when expected, or at all. Even if we do, we may not be able to maintain or increase profitability.

We expect our operating expenses to increase over the next several years as we scale our operations, increase research and development efforts relating to new offerings and technologies, hire more employees, and operate as a public company. These efforts may be more costly than we expect and may not result in meaningful revenue or growth in our business. Any failure to initiate and increase our revenue sufficiently to keep pace with our investments and other expenses could prevent us from achieving or maintaining profitability or positive cash flow. If our future growth and operating performance fail to meet investor or analyst expectations, or if we have future negative cash flow or losses resulting from expanding our operations, this could have a material adverse effect on our business, financial condition and results of operations.

Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.

We have been focused on developing the next generation of geolocation services utilizing vertical (z-axis) location services and in order for us to be profitable, our services require substantial adoption across disparate industries. We have only recently begun to commercially market our services, so it is difficult, in consideration of our limited operating history, to evaluate our future prospects and the risks and challenges we may encounter. Risks and challenges we have faced or expect to face include our ability to:

- forecast our revenue and budget for and manage our expenses;
- attract new customers and retain existing customers;
- effectively manage our growth and business operations, including planning for and managing capital expenditures for our current and future infrastructure, and managing our supply chain and supplier relationships related to our services;
- effectively manage our spending on sales and marketing in order to address a disparate set of industries;
- comply with existing and new or modified laws and regulations applicable to our business;
- anticipate and respond to macroeconomic changes and changes in the markets in which we operate;
- maintain and enhance the value of our reputation and brand;
- develop and protect intellectual property; and
- hire, integrate and retain talented people at all levels of its organization.

If we fail to address the risks and difficulties that we face, including those associated with the challenges listed above as well as those described elsewhere in this “Risk Factors” section, our business, financial condition and results of operations could be adversely affected. Further, because we have limited historical financial data and operate in a rapidly evolving market, any predictions about our future revenue and expenses may not be as accurate as they would be if we had a longer operating history or operated in a more developed market. Forecasting the revenue potential of our services is made more difficult by the fact that legacy location technologies, such as GPS, were developed by the federal government and made available to commercial users without charge. As a result, one of the adoption hurdles that must be overcome is convincing enterprise customers that the additional accuracy and security made available by our services justifies paying for them. We have encountered in the past, and we will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in rapidly changing industries. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations and our business, financial condition and results of operations could be adversely affected.

Pinnacle z-axis is a brand new capability, and adoption may be delayed by our potential customers’ unfamiliarity with 3D position, a lack of ecosystem support (e.g., specific device sensors, 3D routing) and/or other factors.

We do not sell our Pinnacle z-axis solutions directly to end users. Instead, we provide location technology that integrates with devices and applications that are created or distributed by third parties. Accordingly, our future growth significantly depends on third parties choosing to incorporate our technology into smartphone devices, applications and other new device types and markets, such as the Internet of Things, eVTOLs, UAVs and other markets that utilize location. We also depend on our customers, resellers and licensees to develop products and services with value-added features to drive sales and demand. Because GPS has been viewed in the marketplace as a reliable geolocation service provided for free to end users, our customers may not see a business need to integrate our solutions into our devices and applications. Despite efforts to educate customers about the need for z-axis geolocation services, there can be no assurance that such efforts will be successful and as a result, a market for our solutions may not be created.

The majority of our business plan depends on selling services that must be licensed and integrated into our customers’ platforms for sales to end users, and we typically only generates revenue from the arrangements when end users access those third-party platforms and utilize our services.

Our business plans are dependent in part on the sale of location services to our customers, which are third-party developers who use our services to create applications for use in mobile devices, on vehicles and in other platforms. For these types of contracts, we recognize revenue when end users access and use our customers’ applications. Contracts of this type do not contain purchase commitments and our limited operating history makes estimating the future variable volume and revenue associated with these contracts difficult. If our customers take longer than expected to integrate our services into their applications or are unable to sell their applications in the volumes or timeframes we expect, then the use of our services by end users and the related recognition of revenue could be delayed or may never occur.

We face intense competition in our market, especially from competitors that offer their location services for free, which could make it difficult for us to acquire and retain customers and end users.

The market for development, distribution and sale of location services is highly competitive. Many of our competitors have strong name recognition, sizable customer bases and significantly greater financial, technical, marketing, public relations, sales, distribution and other resources than we do. These competitors often offer competing services for free and have the financial capabilities to continue to improve upon their location services offering without charging a fee. Certain of our competitors are already vying for market share in the 3D location space through their participation in a federal regulatory proceeding involving the FCC in which wireless mobile telephony providers are being required to enter into relationships with 3D location vendors in order to enable accurate 3D location information to be conveyed to E911 emergency dispatchers with each wireless call made to E911 emergency services. Also, although our services currently offer an improved functionality over the services offered for free, there is no certainty that we will be able to achieve broad market appeal for our 3D location services. In addition, there is no guarantee that our services will be as reliable and with the same geographic coverage as the currently available geolocation services, which may impact our ability to attract customers to utilize our products over the free services offered by our competitors. The performance of our services may vary based on ambient conditions, both physical and environmental which may impact the timing and location accuracy of the system. If our services are not meaningfully superior to those available at lower or no cost, we may have difficulty selling our services, achieving widespread adoption of our services and our business, financial position and results of operations may be harmed.

We face competition from multiple sources.

Our services compete against: (i) other satellite and terrestrial based location technology offerings, such as GPS, Observed Time Difference of Arrival and terrestrial beacons; (ii) other providers of WiFi and cell-based positioning, such as Google, Apple, Polaris and Skyhook; (iii) venue-based solutions such as Bluetooth Low Energy; and (iv) other in-house developed location solutions. In the smartphone location provider market, because Apple and Google control a large percentage of the market share for smartphone operating systems, already provide their services on a nationwide basis, and both offer location provider services free as part of the iOS and Android markets, we are constrained in the distribution and monetization of our services in that market. As noted above, those vendors that secure access to wireless handsets for their 3D location services may be able to leverage a significant competition advantage over other location service vendors. There are also a number of new location technologies in development that may further increase competition to support location capabilities in various wireless devices (such as Internet of Things) and which may require us to meet more stringent accuracy standards.

Certain of our competitors are substantially larger than us and have greater financial, technical, marketing and other resources. Thus, many of these large enterprises are in a better position to withstand any significant reduction in spending by customers in its markets, and often have broader product lines and market focus, have greater brand recognition and may not be as susceptible to downturns in a single market. These competitors may also be able to bundle their products together (such as with mapping software) to meet the needs of a particular customer, may be able to respond more rapidly to new or emerging technologies or changes in customer requirements and may be capable of delivering more complete solutions than we are able to provide. If large enterprises that currently do not compete directly with us choose to enter our markets by acquisition or otherwise, competition for both revenue and data would likely intensify. In addition, the growth of new location technologies currently in development may further increase competition to provide these new technologies. If we are not able to compete successfully for customers, our financial position may be materially adversely affected.

Our Pinnacle network infrastructure is dependent on a hosting arrangement with AT&T.

We entered into an equipment hosting agreement with AT&T, expiring in 2026 (subject to earlier termination after three years in certain circumstances), and there is no assurance that the agreement will be renewed. This AT&T agreement provides for such important capabilities as the hosting of our Pinnacle network at AT&T's wireless sites, the provision of power to the Pinnacle network equipment and AT&T data service to enable the Pinnacle network equipment to communicate with us. We have no contractual right to require AT&T to continue its relationship with us beyond the existing term of the equipment hosting agreement and AT&T may elect not to renew our contracts or we and AT&T may not be able to come to an agreement on renewal or extension terms at or before the end of agreement term. If we cannot secure a renewal or extension of the equipment hosting agreement, we may have to construct a new Pinnacle network prior to expiration of the equipment hosting agreement. Constructing a new network would require significant time and resources that we may not be able to secure. In addition, if there is a delay in our ability to build a new network, our Pinnacle services may experience lengthy disruptions and outages. If we are unable to maintain our relationship with AT&T, our business, financial condition and results of operations would be harmed. Our ability to transmit data is dependent on AT&T's wireless data network and on the associated power supply available within that network. We have experienced temporary and geographically limited service outages due to issues with the AT&T wireless data network.

We rely, in part, on AT&T for distribution of our services to FirstNet® customers.

Simultaneous with the equipment hosting agreement described above, we have entered into a services agreement with AT&T, expiring in October 2022, with no renewal terms. This AT&T agreement created a relationship in which AT&T purchases, markets and sells our services to its FirstNet® subscribers. We have no contractual right to require AT&T to continue its relationship with us, and AT&T may decide not to renew our services contract prior to the end of its term. If we are not able to secure a renewal or extension of our services agreement with AT&T, our ability to sell or market products to FirstNet® and other public safety customers may be impacted, and our business, financial and results of operations may be harmed.

Our services may not be adopted by additional wireless carriers for E911.

We have expended significant resources developing, testing and licensing software and solutions targeted towards E911 services, the primary customers for which are wireless carriers. Certain of these wireless carriers were the subject of an enforcement action by the FCC regarding their lack of compliance with rules requiring the provision of vertical location services in the top 25 cellular market areas (“CMAs”) by April 3, 2021. On June 3, 2021, the FCC adopted consent decrees with each of the named wireless carriers that effectively provided an extension of one year to the April 3, 2021 compliance date in the top 25 CMA’s, but also required the carriers to begin delivering any z-axis information that was available to them and to provide interim reports on their ongoing testing and deployment efforts. While we have successfully signed one national wireless carrier as a customer for E911 services, our ability to sell our Pinnacle service to additional wireless carriers for E911, a service we believe to exceed the current FCC accuracy requirement, is dependent upon the willingness of these carriers to use our service to comply with the FCC mandate, which has been impacted by the FCC’s one year extension and may be impacted by the development and testing of competing solutions to the our technology.

Our ability to offer our service for E911 is also influenced by the willingness of wireless device manufacturers to incorporate our software or services into their device platforms. Apple and Google exert significant market power over services on their respective platforms, and there is no assurance that they will approve or adopt the our software or services in connection with their respective platforms. If Apple and/or Google do not provide such approval, there could be a material adverse impact to our business, financial condition and results of operations.

Our Pinnacle service in smartphones relies on the availability of barometric pressure measurements and 2D location being made available to us or our customers.

In order for our customers to be able to utilize our Pinnacle service in smartphones, we and our customers must have access to barometric pressure measurements and 2D location information, both of which are made available by Application Programming Interfaces provided by Google and Apple. If either Google or Apple meaningfully change their terms of service related to the use of this measurement and location data, choose not to provide this data to us or our customers, or choose not to incorporate location sensors in their devices, our ability to offer our Pinnacle service to our customers on these platforms will likely be impacted.

Mass-market adoption of our TerraPoiNT service will require integration into smartphones, which requires both hardware and software.

Our TerraPoiNT service is currently available with specialized devices. Mass-market adoption of our TerraPoiNT service will require integration into smartphones, which requires additions of both hardware and software. The U.S. market for smartphones, smartphone components, and software is highly concentrated. Our ability to integrate our service into these devices is highly dependent upon: (i) the availability of mass-market TerraPoiNT processors; (ii) the integration of such processors, and associated radio components or designs, into smartphones; and (iii) the integration of our access control and service delivery software. Key manufacturers of devices and chipsets may be unwilling to integrate TerraPoiNT processors and required components into their devices. Further, even if we are able to secure agreements with these leading manufacturers, the terms under which such integrations may occur may not be favorable to us.

Distribution and marketing of, and access to, our services in smartphones are contingent on our distribution partners' and customers' access to a variety of third-party platforms, in particular, mobile application stores. If these third parties limit, prohibit, or otherwise interfere with or change their policies in any material way, it could adversely affect our business, financial condition, and results of operations.

Our customers market and distribute our products (including related mobile applications) through a variety of third-party distribution channels. Our ability to achieve broad market reach is in part dependent on the ability of our distribution partners and customers to utilize mobile application stores, such as the Apple App Store and Google Play Store. Both Apple and Google have broad discretion to change their policies regarding their mobile operating systems and app stores in ways that may limit, eliminate or otherwise interfere with our customers' ability to distribute or market their applications through such stores. To the extent our customers are unable to maintain a productive relationship with either or both of them, our relationships with these customers may be impacted and our ability to achieve broad market reach will be impacted and our business, financial condition and results of operations could be adversely affected.

We rely upon Amazon Web Services to operate our cloud platform and any disruption of or interference with our use of Amazon Web Services or the need for additional cloud support would adversely affect our business, results of operations and financial condition.

We outsource our cloud infrastructure to Amazon Web Services ("AWS"). Customers of our products need to be able to access our platform at any time, without interruption or degradation of performance. AWS runs its own platform that we access, and we are, therefore, vulnerable to service interruptions at AWS. We have experienced and we expect that in the future we may experience interruptions, delays and outages in service and availability from time to time due to a variety of factors, including infrastructure changes, human or software errors, website hosting disruptions and capacity constraints. Capacity constraints could be due to a number of potential causes including technical failures, natural disasters, fraud or security attacks. In addition, if our security, or that of AWS, is compromised, our products or platform are unavailable or our users are unable to use our products within a reasonable amount of time or at all, then our business, results of operations and financial condition could be adversely affected. In some instances, we may not be able to identify the cause or causes of these performance problems within a period of time acceptable to our customers. To the extent that we do not effectively address capacity constraints, either through AWS or alternative providers of cloud infrastructure, our business, results of operations and financial condition may be adversely affected. In addition, any changes in service levels from AWS may adversely affect our ability to meet our customers' requirements. Further, our customers may require it to support additional cloud platforms beyond AWS, which would result in additional costs to our business.

Any of the above circumstances or events may harm our reputation, possibly move customers to stop using our products, impair our ability to increase revenue from existing customers, impair our ability to grow our customer base, subject us to financial penalties and liabilities under our service level agreements and otherwise harm our business, results of operations and financial condition.

We rely on a limited number of key vendors for timely supply of components or services for our service offerings. If these vendors experience problems, we could fail to obtain the equipment and services we require to operate our business successfully.

The components required for our Pinnacle altitude stations and our TerraPoiNT beacons are not available in high volume and are produced by a small number of vendors. We also depend on certain third-party services, in addition to those described elsewhere, for the provision of our services. If we are unable to procure these components or services or design or obtain effective alternatives, we may be unable to produce additional Pinnacle altitude stations or TerraPoiNT beacons, or provide services to our customers, each of which will have a significant impact on our ability to achieve mass-market adoption of our services. As a result, we are reliant upon a limited number of suppliers of these components and services. In the event it becomes necessary to seek alternative vendors, we may be unable to obtain satisfactory replacement vendors on economically attractive terms on a timely basis, or at all, which could increase costs and may negatively impact our ability to expand our service offering or cause disruption in service.

If vendors of our equipment or providers of services on which we rely experience financial difficulties, service or billing interruptions, patent litigation or other problems, our growth and operating results could be negatively impacted.

Our services are available within defined network footprints, and if we are not able to deploy new infrastructure, we will not be able to expand our service area.

Our services are available within defined network footprints. Unlike certain of our competitors that do not require the deployment of network infrastructure to provide location services, we are not able to sell our services outside of these footprints where our customers may require services. In order to expand our footprint, we would need to invest significant time and financial resources to build-out additional infrastructure and there is no certainty that even if we were to be able to secure the financial resources to do so, that we would be able to expand our footprint successfully. In addition, as discussed in a subsequent section, certain of our services, such as our TerraPoiNT service, depend on access to radio spectrum. Although we hold FCC spectrum licenses covering the vast majority of the U.S. population, we do not currently have access to licensed radio spectrum in every location in the United States, and we have not yet secured access to radio spectrum in locations outside the United States. If we are not able to deploy new infrastructure, we will not be able to expand our service area, customers that require service outside of our footprints may choose other service providers, or may combine our service with other offerings, which may impact the value of our business.

There is no guarantee that TerraPoiNT service will be sold to commercial users or achieve broad commercial support in the United States or internationally.

Our TerraPoiNT services have not been implemented for broad commercial use and there is no guarantee that TerraPoiNT services will be widely adopted. Further, there is no certainty that one of our competitors will not develop and commercialize a different solution in the meantime supplanting our market. In addition, our ability to sell TerraPoiNT service may be impacted by political or technological preferences. Foreign countries, especially those with significant resources, may prefer solutions that originated in their country or region, which may limit our global growth potential. There is no certainty that our agreements and/or pending discussions with international strategic partners will result in operational systems, from which we derive revenue or other economics, in other countries. If we are unable to sell TerraPoiNT commercially or to an international market, this will have a negative impact on our business.

Our solutions depend on the use of location by a wide range of applications, including mobile marketing applications. Privacy concerns relating to location data, generally, and our technology could damage our reputation and deter current and potential users from using our products and applications.

Our business depends on the use of location by a wide range of applications, including mobile marketing applications. User perception about the sharing of location data and concerns, more broadly, about the collection of location data, or about our specific practices or the mobile applications that use our location services with regard to the collection, use, disclosure, or security of location information or other privacy related matters, even if unfounded, could damage its reputation and operating results, and could result in default and/or termination of agreements we have with various counterparties.

Natural or man-made disasters or terrorist attacks could have an adverse effect on our business.

Our services are built on a terrestrial-based technical infrastructure, which is vulnerable to damage or interruption from technology failures, power surges or outages, natural disasters, fires, human error, terrorism, intentional wrongdoing or similar events. As a geolocation services provider, there is an increased risk that our technological infrastructure may be targeted in connection with terrorism or cyberattacks, either as a primary target, or as a means of facilitating additional attacks on other targets.

We are increasingly dependent on information technology systems and infrastructure to operate our business, so earthquakes, hurricanes, floods, fires, cyber security attacks, terrorist attacks, power losses, telecommunications failures and similar events could materially disrupt our business operations or our provision of service in one or more markets. Costs we incur to restore, repair or replace our network or technical infrastructure, as well as costs associated with detecting, monitoring or reducing the incidence of unauthorized use, may be substantial and increase our cost of providing service. In addition, any of the aforementioned risks may be augmented if our business continuity and disaster recovery plans prove to be inadequate. If any of the above events were to occur, we could experience an adverse impact to our business, financial condition or results of operations. Additionally, our insurance may not be adequate to cover the costs associated with a natural disaster or terrorist attack. We also rely on third-party providers for certain of our infrastructure, any of which could also be subject to natural or man-made disasters, which could have an adverse effect on our business.

Significant disruptions of our information technology systems or data security incidents, or the perceived failure to adequately protect personal information or other confidential or proprietary data, could trigger contractual and legal obligations, harm our reputation, subject us to liability, cause us to modify our business practices and otherwise adversely affect our business, financial condition and results of operations.

We are dependent on information technology systems and infrastructure to operate our business. We also rely on third parties to operate our business, whether because we have outsourced certain elements of our operations (including elements of our information technology infrastructure) to third parties, or may have incorporated third-party technology into our platform, or rely on third parties to incorporate our products and services into their offerings. As a result, a number of third parties may or could have access to our information technology systems (including our computer networks) or to our confidential information. In addition, many of those third parties in turn subcontract or outsource some of their responsibilities to third parties. As a result, our information technology systems, including the functions of third parties that are involved or have access to those systems, is large and complex. While all information technology operations are inherently vulnerable to inadvertent or intentional security breaches, incidents, attacks and exposures, the size, complexity, accessibility and distributed nature of our information technology systems, and personal or confidential information stored on those systems, make such systems potentially vulnerable to unintentional or malicious internal and external threats on our technology environment.

Vulnerabilities can be exploited from inadvertent or intentional actions of our employees, third-party vendors, business partners, or by malicious third parties. Attacks of this nature are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives (including, but not limited to, industrial espionage) and expertise, including organized criminal groups, “hacktivists,” nation-states and others. For example, despite our efforts to secure our information technology systems and the data contained in those systems, including any efforts to educate or train our employees, we remain vulnerable to phishing attacks.

In addition to the threat of unauthorized access or acquisition of sensitive or personal information, other threats could include the deployment of harmful malware, ransomware attacks, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information. Some of these external threats may be amplified by the nature of third-party web hosting or cloud computing services or by the integration of our product into a third party’s offerings. Our systems may experience directed attacks intended to interrupt our operations; extract money from it; and/or obtain our data (including without limitation end user or employee personal information or proprietary information).

Although we have implemented certain systems, processes, and safeguards intended to protect our information technology systems and data from such threats and mitigate risks to our systems and data, we cannot be certain that threat actors will not have a material impact on our systems or services in the future. Our safeguards intended to prevent or mitigate certain threats may not be sufficient to protect our information technology systems and data due to the developing sophistication and means of attack in the threat landscape. Recent developments in the threat landscape include an increased number of cyber extortion and ransomware attacks, with increases in the amount of ransom demands and the sophistication and variety of ransomware techniques and methodology. Additionally, our third-party vendors or business partners’ information technology systems may be vulnerable to similar threats and our business could be affected by those or similar third-party relationships. The risk of harm to our business caused by security incidents may also increase as we expand our product and service offerings and as we enter into new markets. Implementing, maintaining, and updating security safeguards require substantial resources now and will likely be an increasing and substantial cost in the future.

In the event we or one of our third-party providers were to suffer a security breach involving certain personal information, we would have legal obligations (whether pursuant to law or contractual obligation) to notify certain regulatory authorities, affected individuals, customers and/or other entities. Such statutory and contractual disclosures are costly, could lead to negative publicity, may cause our customers or the public to lose confidence in the effectiveness of our security measures and require us to expend significant capital and other resources to respond to and/or alleviate problems caused by the actual or perceived security breach. Compliance with these obligations could delay or impede the development or distribution of new products and may cause reputational harm.

There is no way of knowing with certainty whether we have experienced any data security incidents that have not been discovered. While we have no reason to believe that we have experienced a data security incident that we have not discovered, attackers have become very sophisticated in the way they conceal their unauthorized access to systems, and many companies that have been attacked are not aware that they have been attacked. Any event that leads to unauthorized access, use or disclosure of personal information could disrupt our business, harm our reputation, compel us to comply with applicable federal and/or state breach notification laws and foreign law equivalents, subject us to time-consuming, distracting and expensive litigation, regulatory investigation and oversight, mandatory corrective action, require us to verify the correctness of database contents, or otherwise subject us to liability under laws, regulations and contractual obligations, including those that protect the privacy and security of personal information. This could result in increased costs to us and result in significant legal and financial exposure and/or reputational harm.

In addition, any actual or perceived failure by us or our vendors or business partners to comply with our privacy, confidentiality or data security-related legal or other obligations to third parties, or any security incidents or other unauthorized access events that result in the unauthorized access, release or transfer of sensitive information, may result in governmental investigations, enforcement actions, regulatory fines, litigation, or public statements against us by advocacy groups or others, and could cause third parties, including current and potential partners, to lose trust in us including existing or potential customers’ perceiving our platform, system or networks as less desirable. We could also be subject to claims by third parties that we have breached our privacy- or confidentiality-related obligations, which could harm our reputation and materially and adversely affect our business and prospects. There can be no assurance that the limitations of liability in our contracts would be enforceable or adequate or would otherwise protect us from liabilities or damages.

We may become subject to litigation arising out of any security breaches, which may adversely affect our business.

Litigation resulting from security breaches may adversely affect our business. Unauthorized access to our systems, networks, or physical facilities could result in litigation with our customers or other relevant stakeholders and may result in liability of or claims for indemnification by us with respect to the same. These proceedings could force us to spend money in defense or settlement, divert management's time and attention, increase our costs of doing business, and/or adversely affect our reputation. We could be required to fundamentally change our business activities and practices or modify our products and/or platform capabilities in response to such litigation, which could have an adverse effect on our business. Any costs incurred as a result of this potential liability could harm our business.

We maintain insurance policies to cover certain losses relating to our information technology systems, but there is no certainty that our policy limits will be sufficient to cover all liabilities that we may face as the result of security incident and there is no assurance that we will be able to maintain our current policies of secure new policies in the future.

We maintain insurance policies to cover certain losses relating to our information technology systems. However, there may be exceptions to our insurance coverage such that its insurance policies may not cover some or all aspects of a security incident. Even where an incident is covered by our insurance, the insurance limits may not cover the costs of complete remediation and redress that we may be faced with in the wake of a security incident and will not provide recovery for reputational harm. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to its insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim.

We depend on the availability of personnel with the requisite level of technical expertise in the telecommunications industry.

Our ability to develop and maintain our solutions and execute our business plan is dependent on the availability of technical engineering, information technology, service delivery and monitoring, product development, sales, management, finance and other key personnel within our geographic location. The specialized engineers and other personnel required for our growth are in high demand by companies with greater resources, so we may have difficulty hiring and retaining critical personnel to develop and operate our services, which will have a negative impact on our ability to grow and achieve widespread customer and user acceptance.

We depend on key members of our senior management team; our performance could be adversely impacted if they depart and we cannot find suitable replacements.

Our success depends largely on the skills, experience and performance of key members of our senior management team, including key members located in India (and subject to potential change in law), as well as our ability to attract and retain other highly qualified management and technical personnel. There is competition for qualified personnel in our industry, and we may not be able to attract and retain the personnel necessary for the development of our business. The loss of the services of key members of management and the inability or delay in hiring new key employees could adversely affect our ability to manage our business and our future operational and financial results.

The failure to successfully obtain, maintain and enforce intellectual property rights and defend against challenges to our intellectual property rights could adversely affect us.

Our services, products and processes rely on intellectual property, including patents, copyrights, trademarks and trade secrets. In some cases, that intellectual property is owned by another party and licensed to us. The value of our intellectual property relies in part on our ability to maintain our proprietary rights to such intellectual property.

If we are unable to obtain or maintain the proprietary rights to our intellectual property, if we are unable to prevent attempted infringement against our intellectual property, or if we are unable to defend against claims that we are infringing on another party's intellectual property, we could be adversely affected. These adverse effects could include us having to abandon, alter and/or delay the deployment of products, services or processes that rely on such intellectual property; having to procure and pay for licenses from the holders of intellectual property rights that we seek to use; and having to pay damages, fines, court costs and attorney's fees in connection with intellectual property litigation.

Our results could be adversely impacted as a result of increased inflation and supply chain pressure impacting our or our vendors' expenses and availability of resources and components.

Our business plans currently call for substantial expansion of our employee base. If we can't manage inflationary pressures and any shortages in the labor market, it could increase labor costs or delay our ability to hire appropriate personnel. Further, inflation and supply chain pressure may impact the availability and cost of services and equipment. Due to the competitive nature of our business, we may not be able to pass on to customers increases in our vendors' costs of production which could greatly affect our operating results. Independently or collectively these factors could have a material adverse effect on our consolidated operating results, financial condition, or ability to grow our business.

Risks Related to Legal and Regulatory Matters

Our business depends on access to radio spectrum to provide certain of our location services and access to such spectrum on a nationwide basis is not a certainty.

Certain of our location services depend on our ability to use portions of the radio spectrum licensed by the FCC. Through our wholly owned affiliate, Progeny LMS, LLC, we hold licenses issued by the FCC to use radio spectrum for location services within the 902-928 MHz band, identified by the FCC as LMS licenses. Our LMS licenses provide coverage of most areas of the U.S. and the vast majority of populated areas within the U.S. Our licenses, however, do not provide nationwide coverage, which we are likely to need to provide certain of our location services on a nationwide basis. Most of the geographic areas where we lack spectrum are generally rural in character, although we do not hold licensed spectrum assets in two well populated locations, Minneapolis and Sacramento. Therefore, we may need to secure additional spectrum licenses from the FCC or other LMS license holders for additional frequencies within the 902-928 MHz band or in other frequencies in order to achieve nationwide coverage or to serve every major city. Radio spectrum is a scarce public resource and no certainty exists that we will be able to obtain additional licenses to provide nationwide coverage or obtain them at a reasonable cost. Very few private entities hold LMS licenses that we could acquire in a private transaction. Although the FCC regularly issues new spectrum licenses, the FCC has not issued new LMS licenses for spectrum within the 902-928 MHz band since 2001 and it could decide to refrain from issuing any additional LMS licenses because the 902-928 MHz frequencies are also used by other services on a shared basis, including by certain unlicensed devices used in homes and for such enterprise services as utility meter reading. If the FCC does issue additional LMS licenses, the FCC is likely to distribute those licenses through an auction process, requiring us to participate and compete with other bidders in such an auction, with no certainty of winning. If we are unable to secure additional LMS licenses or suitable alternative spectrum in a different frequency band, our ability to expand certain of our services nationwide may be negatively impacted, which may have a negative impact on our business, financial condition and results of operations.

We currently do not hold any rights to use licensed spectrum resources outside the U.S. The rules for securing access to spectrum rights vary in each country. Further, different portions of the radio frequency band are used for different purposes in different countries and regions. Therefore, no certainty exists that suitable spectrum resources can be identified or secured in international locations where we would seek to expand our business. In those countries where suitable spectrum resources may be available, spectrum licenses are often distributed through an auction or tender process, meaning we would have to compete with other applicants for access to spectrum rights, the success of which cannot be assured.

Our FCC licenses authorize the use of radio frequencies that are shared with other radio services, which could result in harmful interference and impairment to our use of our licensed spectrum.

Our LMS licenses authorize us to use the upper portion of the 902-928 MHz band. This spectrum is a shared frequency band that is used for a number of purposes both by individuals, businesses and the federal government. Other services that are authorized to use these frequencies include federal radiolocation systems; industrial, scientific and medical devices; licensed amateur radio operations; and certain unlicensed devices. Our use of the spectrum is subject to FCC requirements that our operations must accept harmful interference from other uses of the spectrum that have more senior rights to the spectrum. We have been successful thus far in using our LMS spectrum to operate location services without experiencing material impairment of our location services caused by more senior spectrum uses, but no certainty exists that we will be able to continue to do so. Moreover, for certain specialized uses, including with respect to aviation uses, the use of our spectrum would be subject to additional regulatory review, approvals and/or limitations. More senior uses of the 902-928 MHz band could become more numerous or could alter the characteristics of their transmissions in ways that could increase the interference to our location services, resulting in diminished coverage, consistency and accuracy of our location services.

In addition, we are required to refrain from causing unacceptable levels of harmful interference to unlicensed wireless devices. The FCC issued a decision in 2013 that concluded that, based on field tests, we had successfully demonstrated that our location services did not cause unacceptable levels of harmful interference to such unlicensed wireless devices. Third-party challenges to the FCC decision, are still pending. Further, changes in our operations could alter the transmission characteristics of its location services, potentially requiring us to provide further demonstrations that our location services do not cause unacceptable levels of harmful interference to those unlicensed devices. No certainty exists that the FCC would conclude in the future that we remained successful in making such a demonstration a second time. If we are unable to make this demonstration to the satisfaction of the FCC, we may not be able to make changes to our operating characteristics, potentially preventing the future implementation of desirable innovations.

Our LMS licenses are subject to renewal by the FCC and no certainty exists that we will be able to secure ongoing renewals of our licenses.

Our LMS licenses were issued by the FCC for renewable periods of ten years and the current term of our LMS licenses expired on July 19, 2020. The FCC's rules do not identify a specific threshold that must be demonstrated in order for us to secure renewal of our LMS licenses, which means the applicable threshold is the FCC's statutory obligation to grant a renewal of our licenses if it serves the public interest. Our LMS licenses were initially required to be renewed on July 19, 2010. We timely filed an application for renewal, which the FCC granted on January 17, 2017. The FCC's renewal grant was expressly conditioned on our compliance with build-out requirements, discussed further below. On July 7, 2020, we filed a second request for renewal of our LMS licenses, which is still pending before the FCC. If we secure the renewal of our LMS licenses, our license renewal applications thereafter will be subject to new FCC rules placing additional conditions on license renewal applications. Specifically, in order to secure a third renewal of our LMS licenses in 2030, we will be required to demonstrate compliance with additional requirements, including that we have satisfied its build-out construction requirements, that we use our network to provide service to the public, and that the service provided is at least at the same level of service that was demonstrated at the time of our build-out showing. No certainty exists that we will receive the currently applied for renewal or continue to meet the requirements of such renewal for future applications. If we fail to secure renewals for our LMS licenses, we will not be able to pursue our TerraPoiNT services as previously planned and our business, financial condition and results of operations could be harmed.

Our LMS licenses are subject to end-of-term build-out requirements maintained by the FCC and no certainty exists that we will be able to comply with the build out requirements and retain our licenses.

Our LMS licenses are subject to FCC rules that require licensees to make productive use of their licensed radio spectrum by a specific deadline and continue such use throughout the term of the licenses. If a licensee fails to satisfy one of its build-out deadlines, the FCC will declare its licenses to be null and void. Over the years, the FCC has revoked many of the LMS licenses that the FCC issued to other parties for failing to satisfy their build-out requirements. In nearly all instances in which our licenses have reached a deadline to demonstrate the build-out and use of the licensed spectrum, we have either secured a favorable ruling from the FCC regarding the sufficiency of our build-out showing, or a waiver or extension of our build-out requirements. No certainty exists, however, that we will be able to meet the FCC's requirements in the future or secure waivers or extensions.

We are currently required by the FCC's build-out rules to satisfy build-out demonstrations on October 3, 2020 for our 42 LMS licenses covering the largest 21 Economic Areas ("EAs") in the United States, April 3, 2021 for 40 of our LMS licenses covering the next largest 20 EAs and April 3, 2023 for our remaining LMS licenses. The initial October 3, 2020 deadline identified above had been set for April 3, 2020, but we filed a request for a six month extension of the deadline as a result of the COVID-19 pandemic, which the FCC granted on July 19, 2020, extending our initial deadline to October 3, 2020. Based on the ongoing nature of the pandemic, on September 17, 2020, we filed a request for a second six month extension of the build-out deadline. That request for extension is still pending.

To comply with our build-out requirements on each of the deadlines, we must demonstrate for each of our LMS licenses either that the geographic area of our licensed network provides coverage of at least two-thirds of the population in each of the licensed areas or that we are providing substantial service to end users in each of our licensed areas. On February 2, 2021, we filed a waiver request with the FCC seeking approval to use a third option, demonstrating that the geographic area of our licensed network provides coverage of at least two-thirds of relatively tall buildings (those in excess of three stories) rather than two-thirds of the population. Although no certainty exists that the FCC will grant our waiver request, precedent exists for such a waiver because the FCC previously adopted a rule that permits wireless carriers to demonstrate network coverage of tall buildings in order to show compliance with FCC rules addressing the provision of wireless vertical location services. The FCC has not yet acted on our waiver request to use a two-thirds of tall buildings coverage approach. Nevertheless, we employed our proposed tall building coverage approach with respect to the end-of-term build-out showings that we filed with the FCC for 78 of our 82 LMS licenses that were subject to an April 3, 2021 end-of-term building out deadline assuming our September 17, 2020 second COVID-related extension is granted. On March 31, 2021, we also filed a request for an additional six month extension of the April 3, 2021 build-out deadline to address the possibility that the FCC might refrain from granting our request to demonstrate build-out compliance in some markets using network coverage of tall buildings, or might conclude that our build-out showings are insufficient to demonstrate either two-thirds coverage of tall buildings or substantial service. No certainty exists that the FCC will conclude that our April 3, 2021 build-out showings are satisfactory, or that it will grant a further extension of our April 3, 2021 build-out deadline. Finally, we remain subject to an April 3, 2023 deadline to demonstrate the build-out for our 144 LMS licenses covering less-populous markets. We will need to secure and spend financial resources to develop network infrastructure to demonstrate compliance for these additional licenses in the 72 markets that they are authorized, or secure further extensions or waivers of the build-out requirements for these licenses. No certainty exists that we will be able to comply with these requirements or secure additional extensions or waivers from the FCC of these requirements. If the FCC fails to deem our build-out showings as acceptable and we are unable to secure extensions to our build-out deadlines or necessary waivers, the FCC will declare the applicable LMS licenses to be null and void, which will have a material adverse impact on our ability to expand our TerraPoiNT services as previously planned, and our business, financial condition and results of operations will be harmed.

Our retention and use of our LMS licenses has been the subject of ongoing objections by third parties that could result in the revocation or non-renewal of our LMS licenses.

The FCC's oversight of radio spectrum is conducted using a largely public process that is generally governed by the Administrative Procedure Act and the FCC's rules on public participation in spectrum allocation and licensing proceedings. As a result, our retention and use of our LMS licenses has been the subject of comments and objections from third parties, including other users of the 902-928 MHz frequencies and other current and former licensees of LMS spectrum. In the past, the FCC has regularly rejected and dismissed these objections to our retention and use of our LMS licenses, but no certainty exists that the FCC will continue to do so in the future. Certain of the previous objections remain pending before the FCC, meaning that the FCC could still act on them in a manner that is adverse to us. The pending objections include pleadings that were filed on July 8, 2013 by a number of businesses that use unlicensed radio spectrum in their operations and were asking the FCC to suspend our authority to use our LMS spectrum for commercial purposes. In addition, several affiliated companies controlled by a former licensee of LMS spectrum have filed numerous objections and adverse pleadings against our LMS licenses. A number of these adverse pleadings remain pending, including a petition, dated February 3, 2021, requesting the FCC to reallocate the 902-928 MHz band for other purposes. Although the FCC has consistently rejected the adverse pleadings that were filed by this individual in the past, no certainty exists that the FCC will continue to do so. If the FCC acts on any current or future objections by third parties, our LMS licenses could be revoked or not renewed, which will have a material adverse impact on our ability to expand TerraPoiNT as previously planned and our business, financial condition and results of operations will be harmed.

A portion of our business plan targets government customers, which subjects us to risks, including early termination, audits, investigations, sanctions and penalties.

One of our business strategies is to develop business relationships with U.S. government agencies for the provision of our products and services. We currently contract directly with U.S. government agencies, including NASA, and perform as a subcontractor to other contractors under U.S. government programs. As a U.S. government contractor, our business is subject to statutes and regulations applicable to companies doing business with the U.S. government, including the Federal Acquisition Regulation, or FAR, and NASA FAR Supplement, or NFS.

The funding of U.S. government programs is subject to annual U.S. Congressional appropriations. Long-term government contracts and related orders are subject to cancellation if appropriations for subsequent performance periods are not made. In addition, the U.S. government may modify, curtail or terminate its contracts and subcontracts without prior notice at its convenience and in that event, the counterparty to the contract may generally recover only its incurred or committed costs and settlement expenses and profit on work completed prior to the termination. If the government terminates a contract for default, the defaulting party may be liable for any extra costs incurred by the government in procuring undelivered items from another source. The termination of funding for a U.S. government program that we support, or any modification or curtailment of our U.S. government prime contracts or subcontracts, would result in a loss of anticipated future revenue attributable to that program, which could have an adverse effect on our operations, financial condition or U.S. government customer demand for our products and services.

In addition, U.S. government contracts normally contain additional requirements that may increase our costs of doing business, reduce our profits, and expose us to liability for failure to comply with these terms and conditions. These compliance costs might further increase in the future, reducing our margins, which could have a negative effect on our financial condition. These requirements include, for example:

- specialized disclosure and accounting requirements unique to U.S. government contracts;
- financial and compliance audits;
- public disclosures of certain contract and company information; and
- mandatory socioeconomic compliance requirements, including labor requirements, non-discrimination and affirmative action programs and environmental compliance requirements.

Failure to comply with these U.S. government contracting regulations and requirements may result in potential price adjustments, recoupment of U.S. government funds after such funds have been spent, civil and criminal penalties, or administrative sanctions such as suspension or debarment from U.S. government contracting or subcontracting for a period of time and could have a material adverse effect on our reputation and ability to secure future U.S. government contracts.

Our government contract activities are subject to audits and investigations by U.S. government agencies, including agency Inspectors General, regarding our compliance with U.S. government contract requirements. If any audit, inquiry or investigation uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, suspension of payments, fines, and suspension or debarment from doing business with the U.S. government.

In addition, if we fail to comply with U.S. government contracting laws, regulations and contract requirements, our contracts may be subject to termination, and we may be subject to financial and/or other liability under our contracts, the Federal Civil False Claims Act (including treble damages and other penalties), or criminal law. In particular, the False Claims Act's "whistleblower" provisions also allow private individuals, including present and former employees, to sue on behalf of the U.S. government. Any penalties, damages, fines, suspension, or damages could adversely affect our ability to operate our business and our financial results.

We and our service providers collect, process, transmit, and store personal information, which creates legal obligations and may give rise to additional costs and liability. Failure to comply with federal, state and foreign laws and regulations relating to privacy and data protection could adversely affect our business and its financial condition.

We collect, process, transmit and store personal information, such as certain individual geolocation information, and other personal information relating to its business contacts, personnel, end users, and website visitors, and we may rely in part on third parties that are not directly under its control to manage certain of these operations on its behalf. A variety of federal and state laws and regulations, as well as international laws and regulations (including as applicable General Data Protection Regulation) govern the collection, use, retention, sharing and security of this information.

The U.S. privacy and data protection legal landscape continues to evolve, with California and Virginia having enacted broad-based data privacy and protection legislation and with states and the federal government continuing to consider additional data privacy and protection legislation. The potential effects of this legislation are far-reaching and may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. The California Consumer Privacy Act ("CCPA") went into effect in January 2020 and gives California residents certain rights with respect to their personal information such as rights to access and require deletion of their personal information, opt out of the sale of their personal information, and receive detailed information about how their personal information is used. The CCPA also provides for civil penalties for violations, as well as a private right of action for certain data breaches. The CCPA was amended, and the California Office of the Attorney General published final regulations to implement portions of the CCPA. Additionally, in November 2020, California voters passed the California Privacy Rights Act ("CPRA") ballot initiative, which introduces significant amendments to the CCPA and confers enforcement power on a new state regulatory body to supplement the enforcement powers of the California Attorney General. The CPRA will go into effect on January 1, 2023 and new CPRA regulations are expected to be introduced. In addition, the Virginia legislature passed the Consumer Data Protection Act ("VCDPA"), which includes new consumer rights, an appeals process for certain aggrieved consumers, and data protection assessments for certain data processing activities. We will need to implement mechanisms and internal processes to fulfill the new obligations under the VCDPA. Although we do not have direct interaction with end users, we may still be subject to these laws with respect to other personal information we process, or by way of acting as a service provider to our customers, which may bear additional obligations under these laws.

We or our customers may also be subject to FCC rules regarding Customer Proprietary Network Information or other restrictions on our ability to use certain data that we collect in connection with 911 or other calls. Further, the FCC's wireless location rules subject us to additional privacy restrictions with respect to our use of any location information resulting from the provision of location services to support 911 emergency services.

Our obligations under applicable data privacy laws, regulations, contracts, industry standards, self-certifications, and other documentation may include maintaining the confidentiality, integrity and availability of personal information or other data in our possession or control, maintaining reasonable and appropriate security safeguards as part of an information security program, and limits on the use and/or cross-border transfer of such personal information or other data. These obligations create potential liability to regulators, our business partners and customers, end users, and other relevant stakeholders and also may impact the attractiveness of our services to existing and potential customers. Data protection laws around the world often require "reasonable", "appropriate" or "adequate" technical and organizational security measures, and the interpretation and application of those laws are often uncertain and evolving, and there can be no assurance that our security measures will be deemed adequate, appropriate or reasonable by a regulator or court.

Given the evolving nature of security threats and evolving safeguards, we cannot be sure that our chosen safeguards will protect against security threats to our business, including the personal data that we process. However, even security measures that are appropriate, reasonable, and/or in accordance with applicable legal requirements may not be able to fully protect our information technology systems and the data contained in those systems, or our data that is contained in third parties' systems. Moreover, certain data protection laws impose on us responsibility for our employees and third parties that assist with aspects of our data processing. Our employees' or third parties' intentional, unintentional, or inadvertent actions may increase our vulnerability or expose us to security threats, such as phishing attacks, and we may remain responsible for successful access, acquisition or other disclosure of our data despite the quality and legal sufficiency of our security measures.

In addition to the risk of data breaches and noncompliance with applicable law, we may be exposed to additional liability for our failure to adhere to the technical or operational security requirements of the Payment Card Industry Data Security Standards (“PCI DSS”) if and as applicable, imposed by the Payment Card Industry Security Standards Council to protect cardholder data. Penalties arising from PCI DSS enforcement are inherently uncertain as penalties may be imposed by various entities within the payment card processing chain without regard to any statutory or universally mandated framework. Such enforcement could threaten our relationship with our banks, card brands we do business with, and our third-party payment processors.

We publish privacy policies, notices and other documentation regarding our collection, processing, use and disclosure of personal information. Although we endeavor to comply with our published policies and other published documentation, we may at times fail to do so or may be perceived to have failed to do so. Moreover, despite our efforts, we may not be successful in achieving compliance if our employees or vendors fail to comply with our published policies or other documentation. Such failures can subject us to potential law enforcement or legal action if they are found to be deceptive, unfair, or misrepresentative of our actual practices.

We expect that new industry standards, laws and regulations will continue to be proposed regarding privacy, data protection and information security in many jurisdictions. We cannot yet determine the impact such future laws, regulations and standards may have on our business. We expect that the evolving regulatory interpretation and enforcement of data protection laws, such as the CCPA, CPRA, and VCDPA, as well as other domestic and foreign data protection laws, will lead to increased operational and compliance costs and may require us to make changes to our operations, policies, and procedures.

Our business is subject to a wide variety of additional extensive and evolving government laws and regulations. Failure to comply with such laws and regulations could have a material adverse effect on our business.

We are subject to a wide variety of laws and regulations relating to various aspects of our business, including with respect to our wireless location services, employment and labor, health care, tax, privacy and data security, health and safety, customs and government contracting. Laws and regulations at the foreign, federal, state and local levels frequently change, especially in relation to new and emerging industries, and we cannot always reasonably predict the impact from, or the ultimate cost of compliance with, current or future regulatory or administrative changes. We monitor these developments and devote a significant amount of management’s time and external resources towards compliance with these laws, regulations and guidelines, and such compliance places a significant burden on management’s time and other resources, and it may limit our ability to develop new business channels. Moreover, changes in law, the imposition of new or additional regulations or the enactment of any new or more stringent legislation that impacts our business could require us to change the way we operate and could have a material adverse effect on our sales, profitability, cash flows and financial condition.

Failure to comply with these laws or regulations or failure to satisfy any criteria or other requirement under such laws or regulations, such as with respect to obtaining and maintaining licenses, certificates, authorizations and permits critical for the operation of our business, may result in civil penalties or private lawsuits, or result in a delay or the denial, suspension or revocation of licenses, certificates, authorizations or permits, which would prevent us from operating our business.

Additionally, regulation of our industry is still evolving, and new or different laws or regulations could affect our operations and increase direct compliance costs. Application of these laws to our business may negatively impact our performance in various ways, limiting the collaborations we may pursue and increasing our costs and the time necessary to obtain required authorization. The adoption of a multi-layered regulatory approach to any one of the laws or regulations to which we are or may become subject, particularly where the layers are in conflict, could require alteration of our services or operational parameters, which may adversely impact our business. We may not be in complete compliance with all such requirements at all times and, even when we believe we are in complete compliance, a regulatory agency may determine that we are not.

We are subject to stringent U.S. export control and economic sanctions laws and regulations. Unfavorable changes in these laws and regulations or U.S. government licensing policies, our failure to secure timely U.S. government authorizations under these laws and regulations, or our failure to comply with these laws and regulations could have a material adverse effect on our business, financial condition and results of operations.

Our business plans are based in part on the distribution of our services world-wide. We are required to comply with U.S. export control laws and regulations, including the EAR administered by the U.S. Department of Commerce's Bureau of Industry and Security and the foreign asset control regulations administered by the U.S. Department of the Treasury's Office of Foreign Assets Control. Pursuant to these foreign trade control laws and regulations, we are required, among other things, to (i) determine the proper licensing jurisdiction and export classification of products, software, and technology, (ii) obtain licenses or other forms of U.S. government authorization, or qualify for exceptions, to export our products, software, and technology outside the United States, and (iii) avoid engaging in unauthorized transactions with certain sanctioned countries, territories, entities, and individuals. Violations of applicable export control and sanctions laws and related regulations, which are enforced on a strict liability basis, could result in criminal and administrative penalties, including fines and possible denial of export privileges. U.S. export licenses or license exceptions are required to transfer or make accessible certain of our software source code and technology to our non-U.S. employees (deemed exports).

In addition, U.S. export control laws and related licensing policies continue to change, further regulating the export and re-export of our products, services, and technology from the U.S. and abroad, and increasing our costs and the time necessary to obtain required authorization. For example, should exceptions or exemptions under the EAR be changed, our activities otherwise authorized via these mechanisms may become unavailable and could result in the need for additional export authorizations.

Additionally, changes to the administrative implementation of export control laws at the agency level may suddenly change as a result of geopolitical events, which could result in existing or proposed export authorization applications being viewed in unpredictable ways, or potentially rejected, as a result of the changed agency level protocol. Increasing trade tensions with China and Russia, in particular, may affect our supply chain, increase direct and indirect compliance costs, or significantly impact relations with business partners. The extensive and changing nature of these export control laws and related licensing policies may diminish our ability to market our solutions in the certain markets.

We are exposed to risks related to geopolitical and economic factors, laws and regulations and our international business subjects us to numerous political and economic factors, legal requirements, cross-cultural considerations and other risks associated with doing business globally.

Although our international business is still in its early stages, its development is subject to both U.S. and foreign laws and regulations, including, without limitation, laws and regulations relating to export/import controls (described above), sanctions, technology transfer restrictions, government contracts and procurement, data privacy and protection, anti-corruption laws, including the FCPA, the anti-boycott provisions of the U.S. Export Administration Act, security restrictions and intellectual property. Failure by us, our employees, affiliates, partners or others with whom we work to comply with applicable laws and regulations could result in administrative, civil, commercial or criminal liabilities, including suspension or debarment from government contracts or suspension of our export/import privileges. New regulations and requirements, or changes to existing ones in the various countries in which we operate can significantly increase our costs and risks of doing business internationally.

Changes in laws, regulations, political leadership and environment, and/or security risks may dramatically affect our ability to conduct or continue to conduct business in international markets, including sales to customers and purchases from suppliers outside the U.S. We may also be impacted by U.S. and foreign national policies and priorities, political decisions and geopolitical relationships, any of which may be influenced by changes in the threat environment, political leadership, geopolitical uncertainties, world events, bilateral and multi-lateral relationships and economic and political factors, and any of which could impact our operations and/or export authorizations, or delay purchasing decisions or payments and the provision of supplies, goods and services. Global economic conditions and fluctuations in foreign currency exchange rates could further impact our business. For example, the tightening of credit in financial markets outside of the U.S. could adversely affect the ability of our customers and suppliers to obtain financing and could result in a decrease in or cancellation of orders for our products and services or impact the ability of our customers to make payments.

We also are increasingly dependent on in-country suppliers and we face risks related to their failure to perform in accordance with the contracts and applicable laws, particularly where we rely on a sole source supplier. The services we provide internationally are sometimes in countries with unstable governments, economic or fiscal challenges, military or political conflicts and/or developing legal systems. This may increase the risk to our employees, subcontractors or other third parties, and/or increase the risk of a wide range of liabilities, as well as loss of property or damage to our products.

The occurrence and impact of these factors is difficult to predict, but one or more of them could have a material adverse effect on our financial position, results of operations and/or cash flows.

Risks Related to our Common Stock

If we issue and sell additional shares of our Common Stock in the future, our existing stockholders will be diluted and our stock price could fall.

Our amended and restated certificate of incorporation authorizes the issuance of up to 500,000,000 shares of Common Stock, of which, as of December 31, 2021 96,546,611 shares were outstanding, 14,787,763 shares were reserved for issuance under our stock incentive plans or other outstanding options and 23,070,133 shares were issuable upon the exercise of warrants. As a result, we have a large number of shares of Common Stock that are authorized for issuance and are not outstanding or otherwise reserved, and could be issued at the discretion of our board of directors (our “Board”). We expect to seek additional financing in the future in order to fund our operations, and if we issue additional shares of Common Stock or securities convertible into Common Stock, our existing stockholders will be diluted. Our Board may also choose to issue shares of our Common Stock or securities convertible into or exercisable for our Common Stock to acquire assets or companies, for compensation to employees, officers, directors, consultants and advisors, to fund capital expenditures and to enter into strategic partnerships. Additionally, shares of Common Stock could be issued for anti-takeover purposes or to delay or prevent changes in control or management of the Company. Our Board may determine to issue shares of our Common Stock on terms that our stockholders do not believe enhance stockholder value, or that may ultimately have an adverse effect on our business or the trading price of our Common Stock. Further, the issuance of any such shares may cause further dilution to the ownership interest of our current stockholders, reduce the book value per share of our Common Stock and may contribute to a reduction in the market price for our Common Stock.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Certain of our executive officers, directors and stockholders own a significant percentage of our outstanding capital stock. As of December 31, 2021, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially owned approximately 90% of our outstanding shares of Common Stock. Accordingly, our directors, executive officers and certain stockholders have significant influence over our affairs due to their substantial stock ownership coupled with their positions on our management team. For example, these stockholders may be able to control or influence elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This concentration of ownership may prevent or discourage unsolicited acquisition proposals or offers for our Common Stock that some of our stockholders may believe is in their best interest.

We are subject to the reporting requirements of federal securities laws, compliance with which involves significant time, expense and expertise.

We are a public reporting company and are subject to the information and reporting requirements of the Exchange Act and other federal securities laws, including the obligations imposed by the Sarbanes-Oxley Act of 2002. The ongoing costs associated with preparing and filing annual, quarterly and current reports, proxy statements and other information with the SEC in the ordinary course, as well as preparing and filing audited financial statements, are significant and may cause unexpected increases in operational expenses. Our present management team is relatively small and may be unable to manage the ongoing costs and compliance effectively. It may be time consuming, difficult and costly for us to hire additional financial reporting, accounting and other finance staff in order to build and retain a management team with adequate expertise and experience in operating a public company. Although our Common Stock trades on The Nasdaq Capital Market, a regular trading market for our Common Stock may not be sustained in the future.

In addition, as a public reporting company we will be required to document and test our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act so that our management can certify as to the effectiveness of our internal control over financial reporting by the time our second annual report is filed with the SEC and thereafter, which will require us to document and make significant changes to our internal control over financial reporting. Likewise, our independent registered public accounting firm will be required to provide an attestation report on the effectiveness of our internal control over financial reporting at such time as we cease to be an “emerging growth company,” as defined in the Jumpstart our Business Startups Act (the “JOBS Act”), if we are an “accelerated filer” or “large accelerated filer” at such time. Our predecessor, Spartacus, identified a deficiency in internal control over financial reporting which resulted in a material weakness in internal control over the classification of its warrants prior to the closing of the Business Combination. To address the material weakness during the year ended December 31, 2021, we designed and implemented new internal controls, including review controls, conducted additional employee training, and engaged third party specialist and resources to assist with the accounting and valuation of the warrants. Based on the cumulative changes implemented, as well as management’s evaluation of the design and operating effectiveness of the new controls, management has concluded that the material weakness related to our classification of warrants, has been remediated as of December 31, 2021. While we believe we have remediated the material weakness, we may identify additional material weaknesses in our internal control over financial reporting in the future that could result in a material misstatement of our annual or interim consolidated financial statements not being prevented or detected in a timely way. If we fail to maintain adequate internal controls, including any failure to implement required new or improved controls, or if we experience difficulties in their implementation, we could fail to meet our financial reporting obligations and our business, financial results and reputation could be harmed.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

The continued operation and expansion of our business will require substantial funding. We have paid no cash dividends on any of our capital stock to date and we currently intend to retain our available cash to fund the development and growth of our business. Any determination to pay dividends in the future will be at the discretion of our Board and will depend upon our results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our Board deems relevant. We do not anticipate paying any cash dividends on our Common Stock in the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock, which may never occur.

Certain of our Warrants are exercisable, which could increase the number of shares eligible for future resale in the public market and result in dilution to our stockholders.

Outstanding warrants to purchase an aggregate of 18,750,000 shares of Common Stock became exercisable on November 27, 2021 (the 30th day following the closing of the Business Combination) in accordance with the terms of the warrant agreement governing those securities. These warrants consist of 10,000,000 public warrants originally included in Spartacus' initial public offering and 8,750,000 private placement warrants. The 8,750,000 private placement warrants have been registered pursuant to a registration statement (File No. 333-260687). Each warrant entitles its holder to purchase one share of Common Stock at an exercise price of \$11.50 per share and will expire at 5:00 p.m., New York time, on October 28, 2026 (five years after the completion of the Business Combination), or earlier upon redemption of our Common Stock or our liquidation. In addition, a warrant for 4,320,133 shares of Common Stock is subject to a lock-up for a period of 180 days following the closing of the Business Combination. To the extent warrants are exercised, additional shares of Common Stock will be issued, which will result in dilution to our then existing stockholders and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could depress the market price of our Common Stock.

A significant portion of our total outstanding shares of our Common Stock (or shares of our Common Stock that may be issued in the future pursuant to the exercise of Warrants) are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our Common Stock to drop significantly, even if our business is doing well.

Subject to certain exceptions, pursuant to the Registration Rights Agreement dated October 28, 2021, by and among us and certain of our stockholders (the "Registration Rights Agreement") and our charter, certain of our stockholders are contractually restricted from transferring any common stock held by such party for a certain period of time. With respect to 5,000,000 shares of Common Stock held by Spartacus Sponsor LLC and its affiliates, including B. Riley Principal Investments, LLC (in each case, or their respective permitted transferees (as defined in our charter)), the applicable lock-up period is one year after the closing of the Business Combination; provided, however, that such lock-up period shall terminate earlier if, for at least 20 trading days with any 30-day trading period commencing no earlier than March 27, 2022 (at least 150 days after the closing of the Business Combination), the last sale price of our Common Stock equals or exceeds \$12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like). With respect to the shares of Common Stock issued to former holders of Holdings and the AT&T Warrant (as defined in the notes to our consolidated financial statements for the year ended December 31, 2021 included elsewhere in this Annual Report on Form 10-K) and underlying warrant shares, the applicable lock-up period is 180 days after the closing of the Business Combination; provided, however, that such lock-up period shall terminate earlier with respect to 50% of the applicable securities held by each of the holders thereof if, for at least 20 trading days within any 30-trading day period commencing no earlier than December 27, 2021 (at least 60 days after the closing of the Business Combination), the last sale price of our Common Stock equals or exceeds \$12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like). With respect to the private placement warrants and the Warrant Shares underlying such warrants, the applicable lock-up period was 30 days after the closing of the Business Combination.

Following the expiration of the applicable lock-up periods, stockholders will no longer be contractually restricted from selling shares of our Common Stock held by them or that may be received by them upon the exercise of the Warrants, as the case may be. As such, sales of a substantial number of shares of our Common Stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our Common Stock. As of the date of this Annual Report on Form 10-K, approximately 76% of our outstanding common stock is subject to lock-up restrictions. As restrictions on resale end and registration statements for the sale of shares of our Common Stock and Warrants by the parties to the Registration Rights Agreement are available for use, the sale or possibility of sale of these shares of Common Stock and Warrants could have the effect of increasing the volatility in the market price of our Common Stock or warrants, or decreasing the market price itself.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our Common Stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 2. Properties.

We maintain a distributed workforce with facilities in McLean, Virginia, Sunnyvale, California, Noida, India and Bangalore, India. Our principle executive office is in McLean, Virginia. Our corporate offices in Virginia include finance, regulatory and network deployment functions, while our California facility hosts our technology development functions among other functions. Our Indian location houses a mix of employees and contractors focused on software development and research and development functions.

Item 3. Legal Proceedings.

In the course of our business, we are involved in litigation and legal matters from time to time. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. We accrue liabilities for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated. We do not believe that any such matters, individually or in the aggregate, will have a material adverse effect on our business, financial condition, results of operations, or cash flows.

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.

Market Information

Our common stock and warrants have been listed on The Nasdaq Capital Market ("Nasdaq") under the symbol "NN" and "NNAVW," respectively.

Holders

As of March 18, 2022, there were approximately 109 and 4 holders of record of our common stock and warrants, respectively. This number does not include beneficial owners whose shares were held in street name.

Dividends

We have never declared or paid, and for the foreseeable future do not expect to declare or pay, cash dividends on our common stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business.

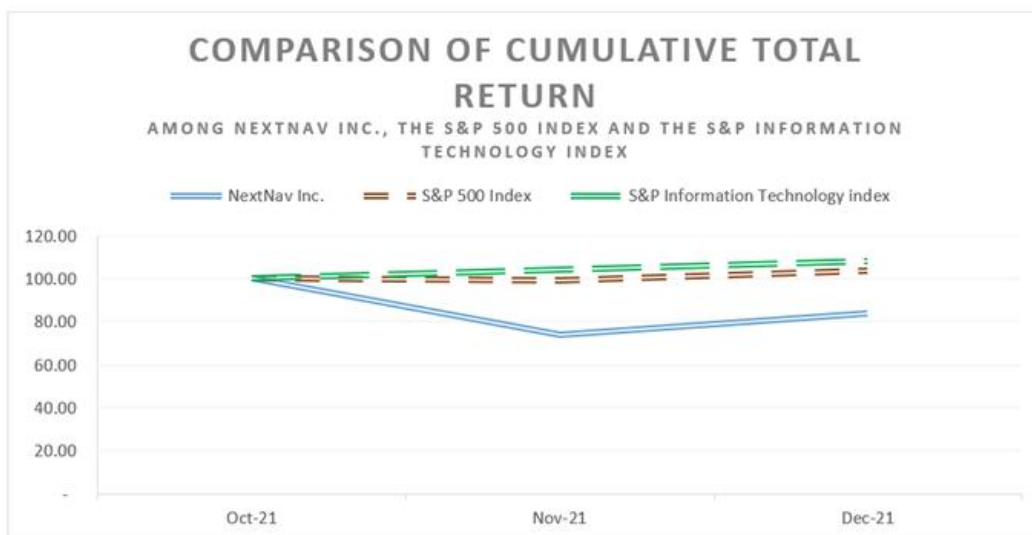
Securities Authorized for Issuance under Equity Compensation Plans

The information required by this item regarding our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report on Form 10-K.

Stock Performance Graph

The following stock price performance graph should not be deemed incorporated by reference by any general statement incorporating by reference this Annual Report on Form 10-K into any filing under the Exchange Act or the Securities Act of 1933, as amended (the "Securities Act"), except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

The graph below compares the cumulative total return of our common stock from October 29, 2021, the date on which our common shares commenced trading on Nasdaq, through December 31, 2021, with the comparable cumulative return of two indices, the S&P 500 Total Return and the S&P Information Technology Total Return. The performance graph and table assume an initial investment of \$100 on October 29, 2021. We have not paid any cash dividends and, therefore, the cumulative total return calculation for us is based solely upon the change in share price. The share price performance shown on the graph is not necessarily indicative of future price performance.



Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

As previously disclosed, immediately prior to the closing of the Business Combination on October 28, 2021, Spartacus issued 20.5 million shares of its Class A Common Stock at a purchase price per share of \$10.00 for aggregate gross proceeds of \$205 million. Each such share was converted into one share of our Common Stock upon the closing of the Business Combination. Additionally, also as previously disclosed, in connection with the closing of the Business Combination, AT&T exchanged all of its warrants exercisable for Holdings securities for one warrant to purchase an aggregate of 4,320,133 shares of our Common Stock at an exercise price of \$0.01 per share, subject to certain adjustments. The shares issued by Spartacus and the warrant issued to AT&T were issued pursuant to and in accordance with the exemption from registration under the Securities Act, under Section 4(a)(2) and/or Regulation D promulgated under the Securities Act.

For a description of the use of proceeds generated in connection with the closing of the Business Combination, see Part II, Item 7 of this Form 10-K.

Purchases of Equity Securities by the Issuer

None.

Item 6. Reserved.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes thereto and other financial information included elsewhere in this Annual Report on Form 10-K. In addition to historical information, some of the information contained in the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Forward-looking statements reflect management’s current expectations and are inherently uncertain. Actual results and outcomes could differ materially for a variety of reasons. You should review “Cautionary Note Regarding Forward-Looking Statements” and “Item 1A. Risk Factors” of this Annual Report on Form 10-K for a discussion of important factors that could cause our actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are the market leader in delivering next generation PNT solutions that overcome the limitations of existing space-based GPS. The world increasingly requires more accurate and resilient PNT capabilities. Public safety, autonomous vehicles, eVTOLs, UAVs, and the app economy all require precise 3D location solutions. Paramedics need to know which apartment a 911 call originated from, ride hailing and delivery apps need to know precisely where you are standing and game developers need precise 3D location data to deliver a next generation augmented reality experience.

In early 2021, we launched the first element of our next generation GPS service through initial commercial service on our nationwide Pinnacle network that was deployed in partnership with AT&T. The Pinnacle network provides “floor-level” altitude detection to over 90% of commercial structures over three stories in the U.S., and is being utilized by FirstNet® for public safety, as well as a growing number of commercial apps and app development platforms, including Atlas Earth, Unity Engine, Eco3d, CRG, Qualcomm, and the Unreal Engine. In December 2021, we entered into an agreement with one of the nation’s largest wireless carriers to deliver vertical location for E911, using our Pinnacle 911 solution for all its customers. We believe that ramp up of services using our existing deployed network will support significant revenue growth over the coming years.

We will be extending our capabilities by expanding the deployment our TerraPoiNT system, which is a nationwide network that is designed to overcome the inherent limitations of traditional GPS. TerraPoiNT utilizes a network of specialized wide area location transmitters that broadcast an encrypted PNT signal on our licensed 900 MHz spectrum with a signal that is 100,000 times stronger than GPS. TerraPoiNT is well suited for urban and indoor environments where existing GPS signals are either distorted or blocked all together. In addition, TerraPoiNT provides redundancy for GPS, which is vulnerable to spoofing and jamming. GPS redundancy is increasingly a U.S. national security priority and is a rising priority in the other parts of the world. Critical infrastructure, including communications networks and power grids, require a reliable GPS signal for accurate timing. A failure of GPS would be catastrophic, and there is no back-up today.

Since the inception of NextNav, LLC in 2007, we have secured valuable FCC licenses covering approximately 93% of the U.S. population for a continuous 8 MHz band of 900 MHz spectrum, filed over 120 patents related to our systems and services, deployed the nationwide Pinnacle network and launched commercial service. In addition, we have deployed our TerraPoiNT solution in 51 markets, and TerraPoiNT received the highest scores in testing by the Department of Transportation of potential PNT back-up solutions.

The Business Combination; Public Company Costs

On October 28, 2021 (the “Closing Date”), we consummated the previously announced Business Combination pursuant to the terms of the Merger Agreement. As a result of the Business Combination, we changed our name to NextNav Inc., and certain blocker entities formed by Holdings equity holders, Holdings and the various operating subsidiaries of Holdings became the Company’s wholly owned subsidiaries, with the equity holders of each of such blocker entities and Holdings and Spartacus’ stockholders becoming our stockholders. The Nasdaq ticker symbols for our common stock, par value \$0.0001 per share, and warrants are “NN” and “NNAVW,” respectively. See Note 1 to our consolidated financial statements for the year ended December 31, 2021 included elsewhere in this Annual Report on Form 10-K for additional information.

As a publicly traded company, we will continue to hire additional personnel and implement procedures and processes to address public company regulatory requirements and customary practices. We expect to incur additional annual expenses as a public company for, among other things, directors' and officers' liability insurance, director fees and additional internal and external accounting, legal and administrative resources, including increased audit and legal fees that Holdings has not previously incurred.

Impact of COVID-19 on NextNav's Business

In March 2020, the COVID-19 outbreak was declared a pandemic by the World Health Organization. There are many uncertainties regarding the current pandemic, and we continue to closely monitor the impact of the pandemic on all aspects of our business, including how it will continue to impact our employees, suppliers, vendors and business partners.

The pandemic has resulted in government authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, stay-at-home or shelter-in-place orders, and business shutdowns. These measures may adversely impact our employees and operations and the operations of our suppliers and business partners. In addition, various aspects of our business cannot be conducted remotely. These measures by government authorities may continue to remain in place for a significant period of time and could adversely affect our development plans, sales and marketing activities, and business operations.

The evolution of the virus is unpredictable at this point and any resurgence may slow down our customer adoption and deployment of the TerraPoiNT network. The COVID-19 pandemic could limit the ability of suppliers and business partners to perform, including third-party suppliers' ability to provide components and materials. We have also experienced and may continue to experience an increase in the cost of raw materials.

The full impact of the COVID-19 pandemic continues to evolve as of the date of this Annual Report on Form 10-K. As such, it is not possible to determine the duration and scope of the pandemic, the scale and rate of economic recovery from the pandemic, supply chain disruptions, and labor availability and costs, or the impact of other indirect factors that may be attributable to the pandemic, and the extent to which these or other currently unanticipated consequences of the pandemic are reasonably likely to materially affect our results of operations. In addition, these direct and indirect factors can make it difficult to isolate and quantify the portion of our costs that are a direct result of the pandemic and costs arising from factors that may have been influenced by the pandemic, including increased wage rates and incentives resulting from constrained labor markets and global supply chain constraints. Management continues to actively monitor our financial condition, liquidity, operations, suppliers, industry and workforce. We expect these factors and their effects on our operations to continue into 2022.

Key Components of Results of Operations

Revenue

We have generated limited revenue since our inception. We derive our revenue from "floor-level" altitude location data, and related products and services, and PNT products and services. Our revenue includes revenue generated through services contracts with wireless carriers, services with applications developers, technology demonstration, assessment and support contracts with government customers, sales of equipment, and licensing of proprietary technology. We recognize revenue when an arrangement exists, services, equipment or access to licensed technology are delivered, the transaction price is determined, the arrangement has commercial substance, and collection of consideration is probable.

Operating Expense

Cost of Goods Sold

Cost of goods sold ("COGS") consist of personnel-related expenses, including salaries, benefits and stock-based compensation, and allocated facility costs for our operations and manufacturing teams. COGS also includes expenses for site leases, cost of equipment, and professional services related to the maintenance of the equipment at each leased site. We expect our operations costs to increase for the foreseeable future as we continue to invest in the expansion of our Pinnacle and TerraPoiNT networks in domestic U.S. and international markets.

Research and Development

Research and development expenses consist of personnel-related expenses, including salaries, benefits and stock-based compensation, and allocated facility costs for our research and development functions. Research and development costs also include outside professional services for software and hardware development, cloud hosting costs, and software licensing costs. We expect our research and development costs to increase for the foreseeable future as we continue to invest in research and development for our current products and future products.

Selling, General and Administrative

Selling, general and administrative expenses consist of personnel-related expenses, including salaries, benefits and stock-based compensation, and allocated facility costs for our business development, marketing, corporate, executive, finance legal, human resources, IT and other administrative functions. Selling, general and administrative expenses also include expenses for outside professional services, including legal, auditing and accounting services, recruitment expenses, travel expenses and certain non-income taxes, insurance and other administrative expenses.

We expect our selling, general and administrative expenses to increase for the foreseeable future as we scale headcount with the growth of our business, and as a result of operating as a public company, including compliance with the rules and regulations of the SEC, legal, audit, additional insurance expenses, investor relations activities, and other administrative and professional services. As a result, we expect our selling, general and administrative expenses will increase in absolute dollars but may fluctuate as a percentage of total revenue over time.

Depreciation and Amortization

Depreciation and amortization expense results from depreciation and amortization of our property and equipment and intangible assets that is recognized over their estimated useful lives.

Interest Expense

Interest expense relates to interest on our senior secured loan facility, which was fully repaid in connection with closing of the Business Combination.

Other Income (expense)

Other income (expense) consists of miscellaneous non-operating items, such as change in fair value of warrants and foreign currency gains (losses).

Results of Operations

The following table sets forth our statements of operations for the periods indicated:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Revenue	\$ 763	\$ 569
Operating Expense:		
Cost of goods sold ⁽¹⁾	18,390	7,770
Research and development ⁽¹⁾	9,465	8,777
Selling, general and administrative ⁽¹⁾	13,555	13,256
Depreciation and amortization	1,782	235
Total operating expenses	43,192	30,038
Operating loss	(42,429)	(29,469)
Interest expense	(17,842)	(10,037)
Other income (expense)	(84,343)	(97,792)
Loss before income taxes	(144,614)	(137,298)
Provision for income taxes	(52)	(38)
Net loss	\$ (144,666)	\$ (137,336)

(1) Cost of goods sold, research and development, and selling, general and administrative expense for the periods do not include depreciation and amortization, which is presented separately in the Consolidated Statements of Comprehensive Loss, but include stock-based compensation as follows:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Cost of goods sold	\$ 232	\$ 893
Research and development	621	1,994
Selling, general and administrative	822	4,476
Total stock-based compensation expense	<u>\$ 1,675</u>	<u>\$ 7,363</u>

Comparison of the Fiscal Years Ended December 31, 2021 and 2020

Revenue

	Year Ended December 31,		\$ Change	% Change
	2021	2020		
	(in thousands)			
Revenue	\$ 763	\$ 569	\$ 194	34%

Revenue increased by \$0.19 million, or 34%, to \$0.8 million for the year ended December 31, 2021 from \$0.6 million for the year ended December 31, 2020. The increase was driven by increased revenue from technology and services contracts with commercial customers. For the year ended December 31, 2021, three customers accounted for 40%, 31%, and 19% of total revenue. For the year ended December 31, 2020, three customers accounted for 53%, 27%, and 18% of total revenue. The accounts receivables as of December 31, 2021, was \$1.7 million and \$0.1 million as of December 31, 2020, whereas deferred revenue balance as of December 31, 2021 was \$1.6 million and zero as of December 31, 2020.

Operating Expense

Cost of Goods Sold (COGS)

	Year Ended December 31,		\$ Change	% Change
	2021	2020		
	(in thousands)			
COGS	\$ 18,390	\$ 7,770	\$ 10,620	137%

COGS increased by \$10.6 million, or 137%, to \$18.4 million for the year ended December 31, 2021 from \$7.8 million for the year ended December 31, 2020. The increase was primarily driven by a \$9.0 million increase in rent expense related to contingent rent recorded for warrants vested in the year 2021 (see NextNav Inc. Notes to the Consolidated Financial Statements — Note 3 for more information), a \$1.0 million increase in site rental and maintenance expense related to new TerraPoiNT and Pinnacle sites, a \$0.6 million increase in outside consulting expense due to the Pinnacle network deployment and a \$0.6 million increase in maintenance and operations of the Pinnacle network. The increases were partially offset by a decrease of \$0.3 million in equipment and material costs, and a decrease of \$0.2 million in payroll-related expenses.

Research and Development

	Year Ended December 31,		\$ Change	% Change
	2021	2020		
	(in thousands)			
Research and development	\$ 9,465	\$ 8,777	\$ 688	8%

Research and development expenses increased by \$0.7 million, or 7.8%, to \$9.5 million for the year ended December 31, 2021 from \$8.8 million for the year ended December 31, 2020. The increase was primarily driven by a \$0.6 million increase in payroll-related expenses driven by increased headcount and annual bonus, and a \$0.5 million increase in software licenses. The increases were partially offset by a \$0.3 million decrease in material and equipment cost.

Selling, General and Administrative

	Year Ended December 31,		\$ Change	% Change
	2021	2020		
	(in thousands)			
Selling, general and administrative	\$ 13,555	\$ 13,256	\$ 299	2%

Selling, general and administrative expenses increased by \$0.3 million, or 2.3%, to \$13.6 million during the year ended December 31, 2021, from \$13.3 million in the year ended December 31, 2020. The increase was primarily driven by a \$1.4 million increase in outside consulting and professional services, a \$0.7 million increase in directors' and officers' insurance, and a \$0.7 million increase in IT related expenses. The increases were partially offset by a \$2.5 million decrease in payroll-related expenses.

Depreciation and Amortization

	Year Ended December 31,		\$ Change	% Change
	2021	2020		
	(in thousands)			
Depreciation and amortization	\$ 1,782	\$ 235	\$ 1,547	658%

Depreciation and amortization expenses increased by \$1.5 million, or 658%, to \$1.8 million during the year ended December 31, 2021, from \$0.2 million during the year ended December 31, 2020. The increase in depreciation and amortization expense is primarily attributable to placing the Pinnacle and TerraPoiNT network assets in service since the third quarter of 2020.

Interest Expense

	Year Ended December 31,		\$ Change	% Change
	2021	2020		
	(in thousands)			
Interest expense	\$ 17,842	\$ 10,037	\$ 7,805	78%

Interest expense increased by \$7.8 million, or 78%, to \$17.8 million during the year ended December 31, 2021, from \$10.0 million during the year ended December 31, 2020. The increase in interest expense is primarily attributable to write off of unamortized debt discount upon full repayment of debt as a part of the Business Combination (see NextNav Inc. Notes to the Consolidated Financial Statements — Note 6 for more information).

Other Income (Expense)

	Year Ended December 31,		\$ Change	% Change
	2021	2020		
	(in thousands)			
Other income (expense)	\$ (84,343)	\$ (97,792)	\$ 13,449	14%

Other expense decreased by \$13.4 million, or 14%, to \$84.3 million during the year ended December 31, 2021, from \$97.8 million during the year ended December 31, 2020. The decrease was primarily driven by change in the fair value of warrants.

Liquidity and Capital Resources

We have incurred losses since our inception and to date have generated only limited revenue. Prior to the closing of the Business Combination, we had funded our operations primarily through the issuances of convertible preferred units and through borrowing under an existing senior secured loan facility (the “Financing Agreement”), which Holdings entered into in December 2019 and amended in June 2021 with Fortress Credit Corporation.

In connection with the consummation of the Business Combination (see NextNav Inc. Notes to the Consolidated Financial Statements — Note 1 for more information), all amounts outstanding under the Financing Agreement were repaid and the Financing Agreement was terminated. As a result, we had no debt outstanding as of December 31, 2021 (see NextNav Inc. Notes to the Consolidated Financial Statements — Note 6 for more information).

As a part of the Business Combination our cash balance increased by approximately \$104.2 million which is available to fund future operations with no debt outstanding.

During the years ended December 31, 2021 and 2020, we incurred net losses of \$144.7 million and \$137.3 million, respectively. During the year ended December 31, 2021, our net cash used in operating activities and investing activities was \$47.9 million and \$1.3 million, respectively. During the year ended December 31, 2020, our net cash used in operating activities and investing activities was \$28.4 million and \$7.2 million, respectively. As of December 31, 2021, we had cash and cash equivalents of \$100.1 million and an accumulated deficit of \$647.9 million. We expect to incur additional losses and higher operating expenses for the foreseeable future. Our primary uses of cash are to fund our operations as we continue to grow our business. We will require a significant amount of cash for expenditures as we invest in ongoing research and development and the expansion of the TerraPoiNT network.

Cash Flows

The following table summarizes our cash flows for the period indicated:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Net cash (used in) operating activities	\$ (47,932)	\$ (28,405)
Net cash (used in) investing activities	(1,282)	(7,178)
Net cash provided by financing activities	135,641	34,771

Cash Flows from Operating Activities

Our cash flows used in operating activities are significantly affected by the growth of our business primarily related to research and development, sales and marketing, and selling, general and administrative activities. Our operating cash flows are also affected by our working capital needs to support growth in personnel-related expenditures and fluctuations in accounts payable and other current assets and liabilities.

Net cash used in operating activities during 2021 was \$47.9 million, resulting primarily from a net loss of \$144.7 million adjusted for non-cash charges of \$84.3 million for change in the fair value of warrant liability, \$9.3 million for amortization of debt issuance cost, \$9.0 million related to issuance of warrant for rent expense, \$1.7 million for stock-based compensation, \$4.7 million for paid-in-kind interest expense, \$1.8 million for depreciation and amortization, and \$0.2 million for asset retirement obligation accretion. Additionally, there was a net increase in operating assets and liabilities of \$14.4 million.

Net cash used in operating activities during 2020 was \$28.4 million, resulting from a net loss of \$137.3 million and non-cash charge of \$97.6 million for the change in fair value of warrant liability, adjusted for non-cash charges of \$7.4 million in stock based compensation charges, non-cash charges of \$3.6 million in interest expense that is primarily attributable to the increase in borrowing from the financing arrangement, non-cash charges of \$0.7 million in amortization of debt issuance costs, non-cash charges of \$0.2 million in depreciation, and a decrease of \$0.9 million in accounts payable, prepaid and other current assets.

Cash Flows from Investing Activities

Net cash used in investing activities during 2021 was \$1.3 million, representing additions to property and equipment primarily related to the deployment of the Pinnacle and TerraPoiNT network and internal use software.

Net cash used in investing activities during 2020 was \$7.2 million, representing additions to property, equipment and related installation costs primarily related to the deployment of the Pinnacle Network.

Cash Flows from Financing Activities

Net cash provided by financing activities during 2021 was \$135.6 million, primarily reflecting cash proceeds from the Business Combination and PIPE investments of \$230.9 million (net of costs paid directly related to the Business Combination and PIPE investment of \$23.1 million), and borrowing of \$24.6 million from the Financing Agreement. The equity and debt proceeds were partially offset by \$96.9 million of debt repayments in connection with the consummation of the Business Combination.

Net cash provided by financing activities during 2020 was \$34.8 million, primarily reflecting \$40.3 million in borrowing from the Financing Agreement offset by \$5.5 million in financing issuance costs.

Critical Accounting Policies and Significant Management Estimates

Our discussion and analysis of our financial condition and results of operations are based on our Consolidated Financial Statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the amounts reported in our Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the ongoing and potential impacts of the COVID-19 pandemic and related government mandates and restrictions. These estimates may change as new events occur or additional information is obtained, and we may periodically be faced with uncertainties, the outcomes of which are not within our control and may not be known for a prolonged period of time. Because the use of estimates is inherent in the financial reporting process, actual results may differ from these estimates under different assumptions or conditions.

The following critical accounting discussion pertains to accounting policies management believes are most critical to the portrayal of our historical financial condition and results of operations and that require significant, difficult, subjective or complex judgments.

Long Lived Assets

Our property and equipment and network under construction are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If circumstances require a long-lived asset or asset group to be tested for possible impairment, impairment is determined by comparing the carrying value of these long-lived assets to management's probability weighted estimate of the future undiscounted cash flows expected to result from the use of the assets or asset group. In the event an impairment exists, a loss is recognized based on the amount by which the carrying value exceeds the fair value of the asset group.

Revenue Recognition

We derive our revenue from indoor and dense-urban positioning technology, products and services including revenue generated through technology demonstration and assessment contracts with customers, support services provided to customers, sales of equipment, and licensing of proprietary technology.

We recognize revenue when an arrangement exists, services, equipment or access to licensed technology are delivered, the transaction price is determined, the arrangement has commercial substance, payment terms are determined and collection of consideration is probable.

We sell software licenses and services through arrangements that may bundle software, equipment, and other services. When we determine that we have separate distinct performance obligations, we allocate the bundled contract price among the various performance obligations based on each deliverable's stand-alone selling price. If the stand-alone selling price is not directly observable, we estimate the amount to be allocated for each performance obligation based on observable market transactions. When we determine the performance obligations are not distinct, we recognize revenue on a combined basis as the obligation is satisfied. To the extent our contracts include variable consideration, the transaction price includes both fixed and variable consideration. The variable consideration contained within our contracts with customers may include discounts, credits and other similar items. When a contract includes variable consideration, we evaluate the estimate of the variable consideration to determine whether the estimate needs to be constrained; therefore, we include the variable consideration in the transaction price only to the extent that it is probable that a significant reversal of the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

We recognize equipment sales and the related costs when control of the equipment passes to the customer, typically upon shipment. Customers do not have rights of return without our prior consent. Revenue pursuant to licensing agreements for our technology represents performance obligations that are satisfied over time. We recognize support services ratably over the periods in which the services are provided; the related costs are expensed as incurred.

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables, and deferred revenue on the Consolidated Balance Sheets. We bill amounts under our agreed-upon contractual terms at periodic intervals for services, upon shipment for equipment, or upon achievement of contractual milestones or as work progresses. Billing may occur subsequent to revenue recognition, resulting in accounts receivable. We may also receive payments from customers before revenue is recognized, resulting in deferred revenue.

Intangible Assets

We hold wireless Multilateration LMS licenses. Certain general regulatory requirements apply to all licensed wireless spectrum, including, for example, certain build-out or "substantial service" requirements, which generally must be satisfied as a condition to the retention of the license. We are actively engaged in either meeting such requirements currently or seeking an extension of such requirements from the FCC for each of our LMS licenses. Although licenses are issued for only a fixed time, ten years, such licenses are subject to renewal by the FCC, based on the achievement of certain milestones and a finding that such renewal would serve the public interest. Renewal of our licenses has occurred previously and at nominal cost. As a result, we treat our wireless LMS spectrum licenses as an indefinite-lived intangible asset. We reevaluate the useful life determination for wireless licenses each year to determine whether events and circumstances continue to support an indefinite useful life. Costs incurred to maintain the FCC licenses are recorded in operating expenses.

We assess indefinite-lived intangible assets for potential impairment annually as of October 1, or during the year if an event or other circumstance indicates that we may not be able to recover the carrying amount of the asset. In evaluating indefinite-lived intangible assets for impairment, we first assess qualitative factors to determine whether it is more likely than not that the fair value of the asset is less than its carrying amount. If we conclude that it is not more likely than not that the fair value of the asset is less than its carrying value, then no further testing is required. However, if we conclude that it is more likely than not that the fair value of the asset is less than its carrying value, then we perform a two-step impairment test to identify potential impairment and measures the amount of impairment we will recognize, if any.

Warrants

Private Placement Warrants are classified as non-current liabilities and reported at fair value at each reporting period. The fair value of the Private Placement Warrants is accounted for using the Monte-Carlo simulation analysis. The Monte-Carlo simulation analysis requires us to make certain assumptions, including the expected volatility, the risk-free interest rate, and the dividend yield. The expected dividend rate of zero is based on the fact that we have not historically paid and do not expect to pay a dividend on our common stock. The risk free rate was based on U.S. Treasury yields for securities with similar terms. Volatility was calculated based on the trading prices for a group of comparable public companies.

Stock-Based Compensation

We estimate the fair value of stock-based awards on the date of grant. The fair value of stock options is determined using the Black-Scholes option pricing model. The fair value of restricted stock units (“RSUs”) and restricted stock awards is based on the closing price of our common stock on the date of grant. We amortize the fair value of awards expected to vest on a straight-line basis over the requisite service periods of the awards, which is generally the period from the grant date to the end of the vesting period. The determination of the fair value of our stock option awards is based on a variety of factors, including, but not limited to, our common stock price, risk-free rate, expected stock price volatility over the expected life of awards, dividend yield and, award’s expected term. The assumptions used to determine the fair value of the stock options represent management’s best estimates. These estimates involve inherent uncertainties and the application of management’s judgment. Additionally, we account for forfeitures for stock-based awards as they occur.

Income Taxes

Under Accounting Standards Codification (“ASC”) 740, “Income Taxes,” deferred tax assets and liabilities are recognized for the expected future tax consequences attributable to net operating losses, tax credits, and temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, which will result in taxable or deductible amounts in the future. Our income tax expense/benefit, deferred tax assets and tax receivable liability reflect management’s best assessment of estimated current and future taxes. Significant judgments and estimates are required in determining the consolidated income tax expense/benefits, deferred tax assets and tax receivable agreement liability. In evaluating our ability to recover our deferred tax assets, we consider all available positive and negative evidence, including projected future taxable income and results of recent operations. Estimating future taxable income is inherently uncertain, requires judgment and is consistent with estimates we are using to manage our business. If we determine in the future that we will not be able to fully utilize all or part of the deferred tax assets, we would record a valuation allowance through earnings in the period the determination was made.

Recently Issued and Adopted Accounting Standards

For information regarding new accounting pronouncements, and the impact of these pronouncements on our consolidated financial statements, if any, refer to Note 2 to our consolidated financial statements for the year ended December 31, 2021 included elsewhere in this Annual Report on Form 10-K.

Emerging Growth Company Status

Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can choose not to take advantage of the extended transition period and comply with the requirements that apply to non-emerging growth companies, and any such election to not take advantage of the extended transition period is irrevocable. Spartacus previously elected to avail itself of the extended transition period, and following the consummation of the Business Combination, we became an emerging growth company (for the period described in the immediately succeeding paragraph) and will continue to take advantage of the benefits of the extended transition period emerging growth company status permits. During the extended transition period, it may be difficult or impossible to compare our financial results with the financial results of another public company that complies with public company effective dates for accounting standard updates because of the potential differences in accounting standards used.

We will remain an emerging growth company under the JOBS Act until the earliest of (a) December 31, 2025, (b) the last date of our fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (c) the date on which we are deemed to be a “large accelerated filer” under the rules of the SEC or (d) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the previous three years.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

We had cash and cash equivalents of \$100 million as of December 31, 2021. We hold our cash and cash equivalent for working capital purposes. Our cash and cash equivalents are held in cash deposits and money market funds. Due to the short-term nature of these instruments, we believe that we do not have any material exposure to changes in the fair value of our cash and cash equivalents due to changes in interest rates. Declines in interest rates, however, would reduce our future interest income. The effect of a hypothetical 10% change in interest rates would not have a material impact on our financial statements.

Concentration of Credit Risk

We deposit our cash with financial institutions, and, at times, such balances may exceed federally insured limits. Management believes the financial institutions that hold our cash and cash equivalents are financially sound and, accordingly, minimal credit risk exists with respect to cash and cash equivalents.

Effects of Inflation and Supply Chain

While inflation and supply chain challenges may impact our revenue and cost of services, we believe the effects of inflation and supply chain challenges on our results of operations and financial condition have not been significant to date. However, there can be no assurance that our results of operations and financial condition will not be materially impacted by inflation or supply chain challenges in the future.

Item 8. Financial Statements and Supplementary Data.

Our consolidated financial statements, together with the report of our independent registered public accounting firm, appear in the Index to Financial Statements beginning on page F-1 of this Annual Report on Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

There has been no change of accountants nor any disagreements with accountants on any matter of accounting principles or practices or financial disclosure required to be reported under this Item.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in Company reports filed or submitted under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

As required by Rules 13a-15 and 15d-15 under the Exchange Act, our Chief Executive Officer and Chief Financial Officer carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2021. Based upon their evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective as of December 31, 2021.

Management Report on Internal Control Over Financial Reporting; Attestation Report of Registered Public Accounting Firm

As discussed elsewhere in this Annual Report on Form 10-K, we completed the Business Combination on October 28, 2021. Prior to the Business Combination, we were a private company and therefore our controls were not required to be designed or maintained in accordance with Rules 13a-15 and 15d-15 under the Exchange Act. The design and implementation of internal control over financial reporting for us post-Business Combination has required and will continue to require significant time and resources from management and other personnel. Because of this, the design and ongoing development of our framework for implementation and evaluation of internal control over financial reporting is in its preliminary stages. As a result, management was unable, without incurring unreasonable effort or expense to conduct an assessment of our internal control over financial reporting as of December 31, 2021. Accordingly, this Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting due to a transition period established by the rules of the SEC for newly public companies (and pursuant to Section 215.02 of the SEC Division of Corporation Finance's Regulation S-K Compliance & Disclosure Interpretations).

This Annual Report on Form 10-K does not include an attestation report of internal controls from the Company's independent registered public accounting firm due to a transition period established by the rules of the SEC as a result of the Company's status as an emerging growth company.

Remediation of Material Weakness

Our predecessor, Spartacus, identified a deficiency in internal control over financial reporting which resulted in a material weakness in internal control over the classification of its warrants prior to the closing of the Business Combination as described in Part I, Item 4 of Spartacus Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 filed with the SEC on October 26, 2021. To address the material weakness during the year ended December 31, 2021, we designed and implemented new internal controls, including review controls, conducted additional employee training, and engaged third party specialist and resources to assist with the accounting and valuation of the warrants. Based on the cumulative changes implemented, as well as management's evaluation of the design and operating effectiveness of the new controls, management has concluded that the material weakness related to our classification of warrants, has been remediated as of December 31, 2021.

Changes in Internal Control over Financial Reporting

Effective October 28, 2021, in connection with the closing of the Business Combination, the Board approved and adopted a Code of Conduct and Ethics which applies to the Company's and its subsidiaries' directors, officers and employees.

As discussed elsewhere in this Annual Report on Form 10-K, in October 2021, we completed the Business Combination and are engaged in the process of the design and implementation of our internal control over financial reporting in a manner commensurate with the scale of our operations post-Business Combination.

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not Applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Code of Conduct and Ethics

Our Board has adopted a written Code of Conduct and Ethics (the “Code of Conduct”) applicable to our and our subsidiaries’ directors, officers and employees (each, a “Covered Person”). The Code of Conduct covers fundamental ethical and compliance-related principles and practices such as accurate accounting records and financial reporting, avoiding conflicts of interest, the protection and use of our property and information and compliance with legal and regulatory requirements. A current copy of the Code of Conduct is posted on the Governance section of the Investors page of our website, which is located at www.nextnav.com. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding any substantive amendment to, or waiver from, a provision of the Code of Conduct and by posting such information on the website address and location specified above.

The Code of Conduct addresses (among other things) (i) the general principles and standards of honest and ethical conduct of the Covered Persons, (ii) the avoidance of conflicts of interest and insider trading, (iii) the Covered Persons’ obligations with respect to corporate opportunities, (iv) procedures with respect to retention of business records and general recordkeeping, (v) bribes, gifts and gratuities, as well as political contributions, (vi) internal procedures for the reporting of violations of the Code of Conduct, and (vii) requests for waivers of or changes to the Code of Conduct.

The additional information required by this item will be set forth in our 2022 Proxy Statement to be filed with the SEC within 120 days of December 31, 2021 and is incorporated by reference into this Annual Report on Form 10-K.

Item 11. Executive Compensation.

The information required by this item will be set forth in our 2022 Proxy Statement to be filed with the SEC within 120 days of December 31, 2021 and is incorporated by reference into this Annual Report on Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this item will be set forth in our 2022 Proxy Statement to be filed with the SEC within 120 days of December 31, 2021 and is incorporated by reference into this Annual Report on Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this item will be set forth in our 2022 Proxy Statement to be filed with the SEC within 120 days of December 31, 2021 and is incorporated by reference into this Annual Report on Form 10-K.

Item 14. Principal Accountant Fees and Services.

The information required by this item will be set forth in our 2022 Proxy Statement to be filed with the SEC within 120 days of December 31, 2021 and is incorporated by reference into this Annual Report on Form 10-K.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a)(1) Consolidated Financial Statements

The consolidated financial statements listed in the Index to Financial Statements beginning on page F-1 are filed as part of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedules

All schedules are omitted as they are inapplicable or the required information is furnished in the consolidated financial statements or the notes thereto.

(a)(3) Exhibits

The exhibits filed as part of this Annual Report on Form 10-K are set forth on the Exhibit Index and are incorporated herein by reference.

Exhibit Index

Exhibit Number	Description
2.1*†	<u>Agreement and Plan of Merger, dated June 9, 2021, by and among Spartacus Acquisition Corporation, Spartacus Acquisition Shelf Corp., NextNav, LLC, NextNav Holdings, LLC, NEA 14 NextNav Blocker, LLC, Oak NextNav Blocker, LLC, Columbia Progeny Partners IV, Inc., Global Long Short Partners Aggregating Holdings Del VII LLC, Global Private Opportunities Partners Holdings II Corp., SASC (SPAC) Merger Sub 1 Corporation, SASC (Target) Merger Sub 2 LLC, SASC (NB) Merger Sub 3 LLC, SASC (OB) Merger Sub 4 LLC, SASC (CB) Merger Sub 5 Corporation, SASC (GB1) Merger Sub 6 LLC, a Delaware limited liability company, and SASC (GB2) Merger Sub 7 Corporation, a Delaware corporation (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Spartacus Acquisition Shelf Corporation on June 10, 2021).</u>
3.1*	<u>Amended and Restated Certificate of Incorporation of NextNav Inc. (incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 filed by NextNav Inc. on November 2, 2021).</u>
3.2*	<u>Bylaws of NextNav Inc. (incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K filed by NextNav Inc. on October 28, 2021).</u>
4.1*	<u>Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-4 filed by NextNav Inc. on August 25, 2021).</u>
4.2*	<u>Specimen Warrant Certificate (included in Exhibit 4.3).</u>
4.3*	<u>Amended and Restated Warrant Agreement, by and among Spartacus Acquisition Corporation, NextNav Inc., and Continental Stock Transfer & Trust Company, as warrant agent (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by NextNav Inc. on October 28, 2021).</u>
4.4*	<u>Warrant To Purchase Common Stock of NextNav Inc. (incorporated by reference to Exhibit 4.4 to the Registration on Form S-1 filed by NextNav Inc. on November 2, 2021).</u>
4.5	<u>Description of NextNav Inc.'s Securities Registered Pursuant to Section 12 of the Securities and Exchange Act of 1934.</u>
10.1	<u>Registration Rights Agreement, dated October 28, 2021, by and among NextNav Inc. and certain stockholders of NextNav.</u>
10.2**+	<u>Form of Indemnification Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by NextNav Inc. on October 28, 2021).</u>
10.3*	<u>Form of PIPE Subscription Agreement (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by NextNav Inc. on October 28, 2021).</u>
10.4**+	<u>NextNav Inc. 2021 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed by NextNav Inc. on October 28, 2021).</u>

10.5*+	NextNav Inc. 2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K filed by NextNav Inc. on October 28, 2021).
10.6*+	2011 Unit Option and Profits Interest Plan (incorporated by reference to Exhibit 4.6 to the Registration Statement on Form S-8 filed by NextNav Inc. on December 27, 2021).
10.7*!	Equipment, Network Colocation and Installation Agreement, dated October 7, 2019, by and between NextNav, LLC and AT&T Services, Inc. (incorporated by reference to Exhibit 10.11 to the Registration Statement on Form S-4 filed by NextNav Inc. on August 25, 2021).
10.8*	Private Placement Warrant Purchase Agreement, dated October 15, 2020, by and between the Company and the Sponsor (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-4 filed by NextNav Inc. on August 25, 2021).
10.9*	Private Placement Warrant Purchase Agreement, dated October 15, 2020, by and between the Company and B. Riley Principal Investments, LLC (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-4 filed by NextNav Inc. on August 25, 2021).
10.10*+	Employment Agreement, dated as of November 17, 2021, by and between NextNav Inc. and Ganesh Pattabiraman (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by NextNav Inc. on November 17, 2021).
10.11*+	Employment Agreement, dated as of November 17, 2021, by and between NextNav Inc. and Christian D. Gates (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by NextNav Inc. on November 17, 2021).
10.12*+	Employment Agreement, dated as of November 17, 2021, by and between NextNav Inc. and David Knutson (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by NextNav Inc. on November 17, 2021).
10.13*+	Form of Nonqualified Option Agreement under the NextNav Inc. 2021 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.12 to the Registration Statement on Form S-1 filed by NextNav Inc. on November 17, 2021).
10.14*+	Form of Restricted Stock Unit Agreement under the NextNav Inc. 2021 Omnibus Incentive Plan (for grants pursuant to the Business Combination) (incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-1 filed by NextNav Inc. on November 17, 2021).
10.15*+	Form of Restricted Stock Unit Agreement under the NextNav Inc. 2021 Omnibus Incentive Plan (Employees) (incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-1 filed by NextNav Inc. on November 17, 2021).
10.16*+	Form of Restricted Stock Unit Agreement under the NextNav Inc. 2021 Omnibus Incentive Plan (Directors) (incorporated by reference to Exhibit 10.15 to the Registration Statement on Form S-1 filed by NextNav Inc. on November 17, 2021).
10.17*+	Form of Restricted Stock Agreement under the NextNav Inc. 2021 Omnibus Incentive Plan (Directors) (incorporated by reference to Exhibit 10.16 to the Registration Statement on Form S-1 filed by NextNav Inc. on November 17, 2021).
21.1	Subsidiaries of the Registrant.
23.1	Consent of Ernst & Young LLP.
31.1	Certification of the Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of the Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of the Chief Executive Officer & Chief Financial Officer pursuant to 18 U.S.C. Section 1350.
101.INS	Inline XBRL Instance Document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed previously.

** Furnished herewith.

† Certain schedules and exhibits have been omitted pursuant to Rule 601(a)(5) of Regulation S-K under the Securities Act. A copy of any omitted schedule or exhibit will be furnished to the SEC upon request.

! Certain confidential portions of the agreement were omitted by means of marking such portions with brackets (due to the registrant customarily and actually treating such information as private or confidential and such omitted information not being material) pursuant to Item 601(b)(10) of Regulation S-K promulgated under the Securities Act. NextNav agrees to supplementally furnish a copy of any confidential portions to the SEC upon request.

+ Indicates a management or compensatory plan.

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.

NEXTNAV INC.

Date: March 23, 2022

By: /s/ Ganesh Pattabiraman
Name: Ganesh Pattabiraman
Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Ganesh Pattabiraman</u> Ganesh Pattabiraman	President, Chief Executive Officer and Director (Principal Executive Officer)	March 23, 2022
<u>/s/ Christian D. Gates</u> Christian D. Gates	Chief Financial Officer (Principal Financial Officer)	March 23, 2022
<u>/s/ Sammaad R. Shams</u> Sammaad R. Shams	Corporate Accounting Officer (Principal Accounting Officer)	March 23, 2022
<u>/s/ Gary M. Parsons</u> Gary M. Parsons	Chairman and Director	March 23, 2022
<u>/s/ Peter D. Aquino</u> Peter D. Aquino	Director	March 23, 2022
<u>/s/ Peter J. Barris</u> Peter J. Barris	Director	March 23, 2022
<u>/s/ Bandel L. Carano</u> Bandel L. Carano	Director	March 23, 2022
<u>/s/ James B. Fleming</u> James B. Fleming	Director	March 23, 2022
<u>/s/ Alan B. Howe</u> Alan B. Howe	Director	March 23, 2022

INDEX TO FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID: 42)	F-2
Consolidated Balance Sheets	F-3
Consolidated Statements of Comprehensive Loss	F-4
Consolidated Statements of Changes in Stockholders' Equity	F-5
Consolidated Statements of Cash Flows	F-6
Notes to Consolidated Financial Statements	F-7

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of NextNav Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of NextNav Inc. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of comprehensive loss, changes in stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting 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.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2012.

Tysons, Virginia
March 23, 2022

NEXTNAV INC.
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2021	2020
	(in thousands)	
Assets		
Current assets:		
Cash and cash equivalents	\$ 100,076	\$ 8,669
Restricted cash	—	5,000
Accounts Receivable	1,740	77
Commitment fee asset	—	610
Other current assets	4,516	3,714
Total current assets	\$ 106,332	\$ 18,070
Network under construction	494	16,828
Property and equipment, net of accumulated depreciation of \$2,714 and \$1,262 at December 31, 2021 and 2020, respectively	21,757	5,706
Intangible assets	4,095	4,144
Other assets	4,145	154
Total assets	\$ 136,823	\$ 44,902
Liabilities, preferred interests, and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	\$ 448	\$ 680
Accrued expenses and other current liabilities	4,600	3,561
Deferred revenue	1,632	—
Total current liabilities	6,680	4,241
Warrants	28,875	101,325
Senior secured loan	—	58,871
Other long-term liabilities	1,311	1,239
Total liabilities	\$ 36,866	\$ 165,676
Preferred Interests:		
Class C Convertible Preferred Units, zero authorized, units issued and outstanding at December 31, 2021; authorized 13,400,000 units and 5,365,566 units issued and outstanding at December 31, 2020; aggregate liquidation preference of zero and \$11,879,116 outstanding at December 31, 2021 and 2020, respectively	\$ —	\$ 11,879
Class D Convertible Preferred Units, zero authorized, units issued and outstanding at December 31, 2021; authorized 94,550,000 units and 42,286,068 units issued and outstanding at December 31, 2020; aggregate liquidation preference of zero and \$357,724,977 outstanding at December 31, 2021 and 2020, respectively	—	357,725
Total preferred interests	\$ —	\$ 369,604
Stockholders' equity (deficit) (1):		
Common Stock, authorized 500,000,000 shares; 96,546,611 and 7,345,733 shares issued and outstanding at December 31, 2021 and 2020, respectively	\$ 11	\$ 2
Additional paid-in capital	747,928	—
Accumulated other comprehensive loss	(121)	(96)
Accumulated deficit	(647,861)	(490,284)
Total stockholders' equity (deficit)	\$ 99,957	\$ (490,378)
Total liabilities, preferred interests, and stockholders' equity (deficit)	\$ 136,823	\$ 44,902

(1) Retroactively restated for the reverse recapitalization as described in Note 1 and 9.

See accompanying notes.

NEXTNAV INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Year Ended December 31,	
	2021	2020
	(in thousands, except per share amounts)	
Revenue	\$ 763	\$ 569
Operating expenses:		
Cost of goods sold (exclusive of depreciation and amortization)	18,390	7,770
Research and development	9,465	8,777
Selling, general and administrative	13,555	13,256
Depreciation and amortization	1,782	235
Total operating expenses	43,192	30,038
Operating loss	(42,429)	(29,469)
Other income (expense):		
Interest expense	(17,842)	(10,037)
Change in fair value of warrants	(84,317)	(97,604)
Other loss, net	(26)	(188)
Loss before income taxes	(144,614)	(137,298)
Provision for income taxes	(52)	(38)
Net loss	\$ (144,666)	\$ (137,336)
Foreign currency translation adjustment	25	12
Comprehensive loss	\$ (144,641)	\$ (137,324)
Net loss	\$ (144,666)	\$ (137,336)
Change in redemption value of preferred interests	(13,831)	(33,072)
Net loss attributable to common stockholders	\$ (158,497)	\$ (170,408)
Weighted average of shares outstanding – basic and diluted	23,561	7,346
Net loss attributable to common stockholder per share – basic and diluted	\$ (6.73)	\$ (23.20)

See accompanying notes.

NEXTRAV INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (1)

	Redeemable Class C Convertible Preferred Units		Redeemable Class D Convertible Preferred Units		Total Preferred Interests	Class A Common Stock		Class A Common Units		Class B-1 Common Units		Class B-2 Common Units		Class B-3 Common Units		Class B-4 Common Units		Additional Paid-In Capital	Accumulated Deficit	Other Comprehensive (Loss)	Stockholders' (Deficit) Equity
	Units	Value	Units	Value	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value				
Balance, December 31, 2019	13,361,628	\$ 11,360	71,338,498	\$ 325,172	\$ 336,532	-	-	10,741,375	\$ 1	5,174,897	\$ -	250,000	\$ -	250,000	\$ -	-	\$ -	\$ -	\$ (327,272)	\$ (84)	\$ (327,355)
Retroactive application of the recapitalization	(7,996,062)	-	(29,052,430)	-	-	2,849,762	\$ 1	(10,741,375)	\$ (1)	(5,162,816)	\$ -	(250,000)	\$ -	(250,000)	\$ -	-	\$ -	\$ -	-	-	-
Balance, December 31, 2019 as adjusted	5,365,566	\$ 11,360	42,286,068	\$ 325,172	\$ 336,532	2,849,762	\$ 1	-	\$ -	12,081	\$ -	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ (327,272)	\$ (84)	\$ (327,355)
Exercise of Common Unit options	-	-	-	-	-	-	-	12,000	1	-	-	-	-	-	-	-	-	2	-	-	3
Cancellation of Common Units	-	-	-	-	-	-	-	-	-	(4,356,299)	-	(250,000)	-	(250,000)	-	-	-	-	-	-	-
Issuance of common units	-	-	-	-	-	-	-	-	-	4,344,218	-	250,000	-	250,000	-	4,483,971	-	-	-	-	-
Recapitalization of Holdings' common units into Company's common stock	-	-	-	-	-	4,495,971	1	(12,000)	(1)	-	-	-	-	-	-	(4,483,971)	-	-	-	-	-
Stock-based compensation expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,363	-	-	7,363
Issuance of common warrants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	-	-	31
Change in redemption value	-	519	-	32,553	33,072	-	-	-	-	-	-	-	-	-	-	-	-	(7,396)	(25,676)	-	(33,072)
Net Loss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(137,336)	-	(137,336)
Foreign currency translation adjustment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(12)	(12)
Balance, December 31, 2020	5,365,566	\$ 11,879	42,286,068	\$ 357,725	\$ 369,604	7,345,733	\$ 2	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ (490,284)	\$ (96)	\$ (490,378)
Vesting of RSUs	-	-	-	-	-	1,459	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Issuance of RSAs	-	-	-	-	-	1,069,818	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2
Issuance of Common Units	-	-	-	-	-	-	-	13,229	-	-	-	-	-	-	-	-	-	2	-	-	2
Stock-based compensation expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,675	-	-	1,675
Issuance of common warrants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,402	-	-	3,402
Change in Redemption Value	-	-	-	\$ 13,831	\$ 13,831	-	-	-	-	-	-	-	-	-	-	-	-	(920)	(12,911)	-	(13,831)
Net loss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(144,666)	-	(144,666)
Foreign currency translation adjustment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(25)	(25)
Recapitalization of Holdings' common units into Company's common stock	-	-	-	-	-	13,229	-	(13,229)	-	-	-	-	-	-	-	-	-	-	-	-	-
Reclassification of Warrant liability to Common Stock warrants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22,194	-	-	22,194
Exercise of Financing Warrants	-	-	-	-	-	12,409,031	1	-	-	-	-	-	-	-	-	-	-	174,327	-	-	174,328
Recapitalization of redeemable convertible preferred units into common stock	(5,365,566)	(11,879)	(42,286,068)	(371,556)	(383,435)	47,651,634	5	-	-	-	-	-	-	-	-	-	-	383,430	-	-	383,435
Net cash contribution from Business Combination and PIPE Financing	-	-	-	-	-	28,055,707	3	-	-	-	-	-	-	-	-	-	-	186,884	-	-	186,887
Transaction and Issuance costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(23,068)	-	-	(23,068)
Balance, December 31, 2021	-	\$ -	-	\$ -	\$ -	96,546,611	\$ 11	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$ 747,928	\$ (647,861)	\$ (121)	\$ 99,957

(1) Retroactively restated for the reverse recapitalization as described in Note 1 and 9.

See accompanying notes.

NEXTNAV INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,	
	2021	2020
(in thousands)		
Operating activities		
Net loss	\$ (144,666)	\$ (137,336)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,782	235
Equity-based compensation	1,675	7,363
Change in fair value of warranty liability	84,317	97,604
Fixed asset write-off	96	259
Issuance of warrants for rent expense	9,033	—
Asset retirement obligation accretion	236	71
Amortization of debt issuance costs and discount	9,257	748
Accrued payment in kind (“PIK”) interest on debt	4,714	3,554
Changes in operating assets and liabilities:		
Accounts receivables and other current assets	(5,297)	(860)
Other assets	(879)	—
Accounts payable	(7,020)	(157)
Accrued expenses and other liabilities	(1,180)	114
Net cash used in operating activities	(47,932)	(28,405)
Investing activities		
Capitalization of costs and purchases of network assets, property, and equipment	(1,022)	(6,419)
Purchase of internal use software	(260)	(759)
Net cash used in investing activities	(1,282)	(7,178)
Financing activities		
Proceeds from senior secured loan	24,638	40,307
Payments towards senior secured loan	(96,871)	—
Senior secured loan issuance costs	—	(5,539)
Proceeds from issuance of Class A Common Units	2	3
Net cash contribution from Business Combination and PIPE financing, net of transaction and issuance costs	207,872	—
Net cash provided by financing activities	135,641	34,771
Effect of exchange rates on cash, cash equivalents and restricted cash	(20)	—
Net increase (decrease) in cash, cash equivalents and restricted cash	86,407	(812)
Cash, cash equivalents and restricted cash at beginning of period	13,669	14,481
Cash, cash equivalents and restricted cash at end of period	\$ 100,076	\$ 13,669
Non-cash financing information		
Recapitalization of redeemable convertible preferred units into common stock	\$ 383,430	\$ —
Exercise of warrants	\$ 174,327	\$ —
Reclassification of warrant liability to common stock warrants	\$ 22,194	\$ —
Issuance of warrants	\$ 9,033	\$ (222)
Interest paid	\$ 4,939	\$ 3,747

See accompanying notes.

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Business; Business Combination

Principal Business

NextNav Inc. and its consolidated subsidiaries, (collectively “NextNav” or the “Company”) delivers next generation positioning, navigation and timing (“PNT”) solutions through network-based solutions, including the Pinnacle system. The Pinnacle system provides “floor-level” altitude service to any device with a barometric pressure sensor, including most off-the-shelf Android and iOS smartphones. The TerraPoiNT system is a terrestrial-based, encrypted network designed to overcome the limitations inherent in the space-based nature of GPS through a network of specialized wide area location transmitters that broadcasts an encrypted PNT signal on a licensed 900 MHz spectrum.

NextNav has devoted substantially all of its efforts to date to planning and organization, the development of its network, ongoing research and development programs, and securing adequate capital for anticipated operations. Since its inception, NextNav has incurred recurring losses and generated negative cash flows from operations and has primarily relied upon debt and equity financings to fund its cash requirements. Refer to the Business Combination section below.

Business Combination

On October 28, 2021 (the “Closing Date”), the Company consummated the previously announced business combination pursuant to the terms of the Agreement and Plan of Merger (the “Merger Agreement”), dated as of June 9, 2021, by and among the Company, Spartacus Acquisition Corporation, a Delaware corporation (“Spartacus”), NextNav Holdings, LLC, a Delaware limited liability company (“Holdings”) and the other parties thereto (the “Business Combination”). As a result of the Business Combination, the Company changed its name from Spartacus Acquisition Shelf Corp. to NextNav Inc., and certain blocker entities formed by Holdings equity holders, Holdings and the various operating subsidiaries of Holdings became the Company’s wholly owned subsidiaries, with the equity holders of each of such blocker entities and Holdings and Spartacus’ stockholders becoming stockholders in NextNav.

In connection with the closing of the Business Combination, Spartacus entered into subscription agreements, whereby the investors named therein (the “PIPE Investors”) committed to purchase an aggregate of \$205.0 million shares of Class A common stock of Spartacus (the “Class A Common Stock”) at a price of \$10.00 per share, which were issued immediately prior to the closing of the Business Combination (the “PIPE Financing”). The shares of Class A Common Stock issued to the PIPE Investors were converted into an equivalent number of shares of common stock of NextNav at the closing of the Business Combination on the Closing Date.

While the legal acquirer in the Business Combination is Spartacus, for financial accounting and reporting purposes under U.S. GAAP, Holdings is deemed to be the accounting acquirer, with the Business Combination being accounted for as a “reverse recapitalization.” A reverse recapitalization does not result in a new basis of accounting. Accordingly, the reverse recapitalization was treated as the equivalent of Holdings issuing stock for the net assets of Spartacus, accompanied by a recapitalization. The net assets of Spartacus are stated at historical costs, with no goodwill or other intangible assets recorded.

Upon the closing of the Business Combination:

- NextNav received \$25.9 million in cash from Spartacus’ trust account in addition to \$205.0 million from the PIPE Investors. In connection with the Business Combination, \$177.1 million was paid for redemptions of the Class A Common Stock and the Company incurred \$23.0 million of equity issuance costs, consisting of advisory, legal, share registration and other professional fees, which were recorded within additional paid-in capital as a reduction of proceeds;
- 17,444,293 shares of Spartacus Class A Common Stock held by stockholders prior to the Business Combination were redeemed from Spartacus’ trust account, leaving 2,555,707 shares of pre-existing Class A Common Stock outstanding after redemption, which were then converted into an equivalent number of shares of common stock of NextNav;
- 5,000,000 outstanding shares of Spartacus’ Class B Common Stock held by Spartacus Sponsor LLC (the “Sponsor”) converted into an aggregate of 5,000,000 shares of Class A Common Stock (the “Founder Shares”), and the Founder Shares were converted into an equivalent number of shares of common stock of NextNav;

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- All issued and outstanding shares of Holdings capital stock converted into an aggregate of 67,419,627 shares of common stock of NextNav where the aggregate consideration paid in the Business Combination to Holdings' equity holders consisted of the 67,419,627 shares of common stock of NextNav, a warrant to purchase 4,320,133 shares of common stock of NextNav, and options for units in Holdings were converted by their terms into options to purchase 1,968,861 shares of common stock of NextNav;
- Spartacus issued an aggregate of 20,500,000 shares of Class A Common Stock to the PIPE Investors pursuant to the closing of the PIPE Financing, which were converted into an equivalent number of shares of common stock of NextNav;
- AT&T Services, Inc. and certain of its affiliates ("AT&T") elected to exchange its outstanding warrants in Holdings for a new warrant to purchase 4,320,133 shares of common stock of NextNav at an exercise price of \$0.01 (the "AT&T Warrant") and the outstanding warrants in Holdings ("Financing Warrants") issued in connection with the Financing Agreement were exercised by the holders and immediately converted into common stock of NextNav. Refer to Note 3 and 7 for further detail of the nature of these warrants; and
- NextNav used a portion of the post-Business Combination proceeds to pay the outstanding balance at October 28, 2021 of \$96.9 million on the outstanding debt of Holdings, which represented the full outstanding principal, accrued cash interest and paid-in-kind interest, and other applicable fees in connection with the Financing Agreement. Refer to Note 6 for further detail.

As a result of the foregoing transactions, as of the Closing Date and immediately following the completion of the Business Combination and the PIPE Financing, NextNav had the following outstanding securities:

- 95,475,334 shares of common stock;
- Options to acquire an aggregate of 1,968,861 shares of common stock;
- 10,000,000 Public Warrants and 8,750,000 Private Placement Warrants, each exercisable for one share of common stock at a price of \$11.50 per share; and
- the AT&T Warrant, exercisable for 4,320,133 shares of common stock at a price of \$0.01 per share.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). All intercompany transactions have been eliminated in consolidation.

The consolidated assets, liabilities and results of operations prior to the reverse recapitalization are those of Holdings. The outstanding shares and corresponding capital amounts, and losses per share, prior to the reverse recapitalization, have been retroactively restated in accordance with Accounting Standards Codification 805, Business Combinations.

Use of Estimates

In preparing the consolidated financial statements in conformity with U.S. GAAP, management makes estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period and accompanying notes. These estimates include those related to the useful lives and recoverability of long-lived and intangible assets, valuation of common stock warrants, income taxes and equity-based compensation, among others. NextNav bases estimates on historical experience, anticipated results and various other assumptions, including assumptions of future events, it believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets, liabilities, equity, revenue and expenses, that are not readily apparent from other sources. Actual results and outcomes could differ materially from these estimates and assumptions.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Cash and Cash Equivalents

Cash and cash equivalents include all cash in banks and highly liquid investments with an original maturity of three months or less when purchased. The combined account balances held on deposit at each institution typically exceed Federal Deposit Insurance Corporation ("FDIC") insurance coverage and, as a result, there is a concentration of credit risk related to amounts on deposit in excess of FDIC insurance coverage. The Company reduces this risk by maintaining such deposits with high quality financial institutions that management believes are creditworthy.

Restricted Cash

Restricted cash represents deposits held in escrow in exchange for a letter of credit. The obligation under the letter of credit was satisfied in the current reporting period, with the restriction on the deposits removed.

Property and Equipment and Network under Construction

Property and equipment, net of accumulated depreciation and network under construction are recorded at cost. Employee-related costs for construction of network assets are also capitalized during the construction phase. Expenditures for maintenance and repairs that do not materially extend the useful lives of property and equipment are charged to cost of goods sold ("COGS") and selling, general and administrative ("SG&A") as incurred. When property or equipment is retired or otherwise disposed of, the related property accounts are relieved of costs and accumulated depreciation and any resulting gain or loss is included in the Consolidated Statements of Comprehensive Loss.

NextNav records asset retirement obligations associated with the contractually required removal of property and equipment assets from leased properties. When an asset retirement obligation is identified, NextNav records the fair value of the obligation discounted at present value as a liability. The fair value of the obligation is also capitalized as property and equipment, which is amortized over the estimated remaining useful life of the associated asset. Accretion expense on the liability is recognized over the estimated life of the related assets.

Asset retirement obligations for the years ended December 31, 2021 and 2020 were:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Beginning Balance	\$ 590	\$ 501
Liabilities incurred	185	55
Liabilities settled	(36)	(37)
Accretion	236	71
Ending Balance	\$ 975	\$ 590

Depreciation is computed using the straight-line method over the estimated useful lives of the assets as follows:

Pinnacle and TerraPoiNT network assets	5–8 years
Office equipment, furniture and software	2–5 years
Leasehold improvements	Shorter of the useful life or lease term

Software Development Costs

Research and development costs to develop software to be sold, leased or marketed are expensed as incurred up to the point of technological feasibility for the related software product. NextNav has not capitalized development costs for software to be sold, leased or marketed to date, as the software development process is essentially completed concurrent with the establishment of technological feasibility. As such, these costs are expensed as incurred and recognized in research and development costs in the Consolidated Statements of Comprehensive Loss.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Software developed for internal use, with no substantive plans to market such software at the time of development, are capitalized and included in intangible assets in the Consolidated Balance Sheets. Costs incurred during the preliminary planning and evaluation and post implementation stages of the project are expensed as incurred. Costs incurred during the application development stage of the project are capitalized. In 2021 and 2020, the Company capitalized \$0.2 million and \$0.7 million, respectively, of development costs related to internal use software.

Internal use software is amortized over a 3 year useful life. Amortization was \$0.3 million and \$0.1 million for the years ended December 31, 2021 and 2020, respectively.

Long Lived Assets

NextNav's property and equipment and network under construction are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If circumstances require a long-lived asset or asset group to be tested for possible impairment, impairment is determined by comparing the carrying value of these long-lived assets to management's probability weighted estimate of the future undiscounted cash flows expected to result from the use of the asset or asset group. In the event an impairment exists, a loss is recognized based on the amount by which the carrying value exceeds the fair value of the asset group.

Indefinite-Lived Intangible assets

NextNav holds wireless Multilateration Location and Monitoring Service ("LMS") licenses. Certain general regulatory requirements apply to all licensed wireless spectrum, including, for example, certain build-out or "substantial service" requirements, which generally must be satisfied as a condition to the license. NextNav is actively engaged in either meeting such requirements currently or seeking an extension of such requirements from the Federal Communications Commission ("FCC") for each of its LMS licenses. Although licenses are issued by the FCC for only a fixed time, ten years, such licenses are subject to renewal by the FCC, based on the achievement of certain milestones and a finding that such renewal would serve the public interest. Upon renewal, the licenses are granted for additional ten-year periods. All of NextNav's licenses are up for renewal at the same time. Renewal of NextNav's licenses has occurred previously and at nominal cost. As a result, NextNav treats its wireless LMS spectrum licenses as an indefinite-lived intangible asset. NextNav reevaluates the useful life determination for wireless licenses each year to determine whether events and circumstances continue to support an indefinite useful life. Costs incurred to maintain the FCC licenses are recorded in operating expenses.

NextNav assesses indefinite-lived intangible assets for potential impairment annually as of October 1 or during the year if an event or other circumstance indicates that NextNav may not be able to recover the carrying amount of the asset. In evaluating indefinite-lived intangible assets for impairment, NextNav first assesses qualitative factors to determine whether it is more likely than not that the fair value of the asset is less than its carrying amount. If NextNav concludes that it is not more likely than not that the fair value of the asset is less than its carrying value, then no further testing is required. However, if NextNav concludes that it is more likely than not that the fair value of the asset is less than its carrying value, then NextNav performs a two-step impairment test to identify potential impairment and measures the amount of impairment it will recognize, if any.

Based on its qualitative assessment performed for the years ended December 31, 2021 and 2020, NextNav concluded that it was not more likely than not that the fair value of its indefinite-lived asset is less than its carrying amount, and as such, no impairment exists.

Revenue

NextNav derives its revenue from indoor and dense-urban positioning technology, products and services including revenue generated through technology demonstration and assessment contracts with customers, support services provided to customers, sales of equipment, and licensing of proprietary technology.

The Company recognizes revenue when an arrangement exists, services, equipment or access to licensed technology are delivered, the transaction price is determined, the arrangement has commercial substance, payment terms are determined and collection of consideration is probable.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company sells software licenses and services through arrangements that may bundle software, equipment, and other services. When the Company determines that it has separate distinct performance obligations, the Company allocates the bundled contract price among the various performance obligations based on each deliverable's stand-alone selling price. If the stand-alone selling price is not directly observable, the Company estimates the amount to be allocated for each performance obligation based on observable market transactions. When the Company determines the performance obligations are not distinct, the Company recognizes revenue on a combined basis as the obligation is satisfied. To the extent the Company's contracts include variable consideration, the transaction price includes both fixed and variable consideration. The variable consideration contained within the Company's contracts with customers may include discounts, credits and other similar items. When a contract includes variable consideration, the Company evaluates the estimate of the variable consideration to determine whether the estimate needs to be constrained; therefore, the Company includes the variable consideration in the transaction price only to the extent that it is probable that a significant reversal of the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

NextNav recognizes equipment sales and the related costs when control of the equipment passes to the customer, typically upon shipment. The Company has made an accounting policy election to account for shipping activities, consisting of direct costs to ship products performed after the control of a product has been transferred to the customer, in cost of goods sold. Customers do not have rights of return without NextNav's prior consent. Revenue pursuant to licensing agreements for NextNav's technology represents performance obligations that are satisfied over time. NextNav recognizes support services ratably over the periods in which the services are provided; the related costs are expensed as incurred.

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables, and deferred revenue on the Consolidated Balance Sheets. The Company bills amounts under its agreed-upon contractual terms at periodic intervals for services, upon shipment for equipment, or upon achievement of contractual milestones or as work progresses. Billing may occur subsequent to revenue recognition, resulting in accounts receivable. The Company may also receive payments from customers before revenue is recognized, resulting in deferred revenue.

The following table presents the Company's revenue disaggregated by category and source:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Commercial	\$ 400	\$ —
Government contracts	303	416
Equipment sales	37	113
Other	23	40
Total revenue	\$ 763	\$ 569

Contract Balances

Accounts receivable are billed and unbilled amounts related to the Company's rights to consideration as performance obligations are satisfied when the rights to payment become unconditional but for the passage of time. As of December 31, 2021 and 2020 the Company's accounts receivable balances were comprised of \$1.7 million and \$0.1 million, respectively.

Contract liabilities relate to amounts billed in advance, or advance consideration received from customers, for which transfer of control of the good or service occurs at a later point in time. As of December 31, 2021 the Company's contract liabilities were \$1.6 million. The Company had no contract liabilities as of December 31, 2020.

Cost of Goods Sold

COGS consist of personnel-related expenses, including salaries, benefits and stock-based compensation, and allocated facility costs for the Company's operations and manufacturing teams. COGS also includes expenses for site leases, cost of equipment, and professional services related to the installation and maintenance of the equipment at each leased site.

Research and Development Costs

Research and development expenses consist of personnel-related expenses, including salaries, benefits and stock-based compensation, and allocated facility costs for the Company's research and development functions. Research and development costs also include outside professional services for software and hardware development, cloud hosting costs, and software licensing costs.

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Selling, General and Administrative

SG&A expenses consist of personnel-related expenses, including salaries, benefits and stock-based compensation, and allocated facility costs for the Company's business development, marketing, corporate, executive, finance legal, human resources, IT and other administrative functions. SG&A expenses also include expenses for outside professional services, including legal, auditing and accounting services, recruitment expenses, travel expenses and certain non-income taxes, insurance and other administrative expenses.

Equity-Based Compensation

Measurement of equity-based compensation with employees is based on the estimated grant date fair value of the equity instruments issued. The fair value of stock options is determined using the Black-Scholes option pricing model. The fair value of restricted stock awards is based on the closing price of NextNav's common stock on the date of grant. NextNav recognizes equity-based compensation on a straight-line basis over the requisite service period of the grant, which is generally equal to the vesting period. NextNav accounts for forfeitures as they occur.

The following details the amount of stock-based compensation included in cost of goods sold, research and development, and selling, general and administrative expenses:

	Year Ended December	
	31,	
	2021	2020
	(in thousands)	
Cost of goods sold	\$ 232	\$ 893
Research and development	621	1,994
Selling, general and administrative	822	4,476
Total stock-based compensation expense	\$ 1,675	\$ 7,363

Basic and Diluted Net Loss per Share

Basic loss per share ("EPS") excludes dilution for common share equivalents and is computed by dividing net loss available to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted EPS is based on the weighted-average number of shares of common stock outstanding during each period, adjusted for the effect of dilutive common share equivalents.

Restricted shares are included in the computation of basic EPS as they vest and are included in diluted EPS, to the extent they are dilutive, determined using the treasury stock method. Outstanding options are included in the computation of diluted EPS, to the extent they are dilutive, determined using the treasury stock method. The AT&T Warrant issued by NextNav entitles AT&T to purchase an aggregate of 4,320,133 shares of NextNav's common stock at an exercise price of \$0.01. The AT&T Warrant is expected to be net settled upon redemption, resulting in an issuance of 4,315,813 of NextNav's common stock. The exercise price represents little consideration compared to the Company's common stock and there are no other vesting conditions or contingencies associated with them. Accordingly, they are included in the basic EPS calculation during the applicable period.

The Company has not considered the effect of the warrants to purchase an aggregate of 18,750,000 shares in the calculation of diluted loss per share, since the exercise of the warrants are contingent upon the occurrence of future events and the inclusion of such warrants would be anti-dilutive.

The determination of the diluted weighted average shares is included in the following calculation of EPS:

	Year Ended	
	December 31,	
	2021	2020
	(in thousands, except per share amounts)	
Numerator		
Net loss	\$ 144,666	\$ 137,336
Less cumulative change in redemption value of preferred units	13,831	33,072
Net loss attributable to common stockholders	\$ 158,497	\$ 170,408
Denominator		
Weighted average shares – basic and diluted	23,561	7,346
Basic and diluted loss per share	\$ 6.73	\$ 23.20

The following details anti-dilutive unvested restricted stock units, as well as the anti-dilutive effects of the outstanding warrants, stock options and preferred units:

	December 31,	
	2021	2020
	(in thousands)	
Antidilutive Shares Excluded		
Warrants	18,750	16,287
Stock Options	1,950	2,025
Unvested Restricted Stock Units	2,896	168
Unvested Restricted Stock Awards	1,070	—
Preferred units	—	47,652

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Income Taxes

Income taxes are accounted for using the asset and liability method. Deferred income taxes are provided for temporary differences in recognizing certain income, expense and credit items for financial reporting purposes and tax reporting purposes. Such deferred income taxes primarily relate to the difference between the tax bases of assets and liabilities and their financial reporting amounts. Deferred tax assets and liabilities are measured by applying enacted statutory tax rates applicable to the future years in which deferred tax assets or liabilities are expected to be settled or realized. Excess tax benefits and tax deficiencies are recognized in the income tax provision in the period in which they occur.

The Company records a valuation allowance when it determines, based on available positive and negative evidence, that it is more-likely-than-not that some portion or all of its deferred tax assets will not be realized. The Company determines the realizability of its deferred tax assets primarily based on the reversal of existing taxable temporary differences and projections of future taxable income (exclusive of reversing temporary differences and carryforwards). In evaluating such projections, the Company considers its history of profitability, the competitive environment, and general economic conditions. In addition, the Company considers the time frame over which it would take to utilize the deferred tax assets prior to their expiration.

For certain tax positions, the Company uses a more-likely-than-not threshold based on the technical merits of the tax position taken. Tax positions that meet the more-likely-than-not recognition threshold are measured at the largest amount of tax benefits determined on a cumulative probability basis, which are more-likely-than-not to be realized upon ultimate settlement in the financial statements. The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense.

Foreign Currency Translation

The functional currency of NextNav's foreign subsidiaries is generally the local currency. Assets and liabilities are translated into U.S. dollars at the exchange rate in effect at the Consolidated Balance Sheet date. Operating accounts are translated at an average rate of exchange for the respective accounting periods. Translation adjustments resulting from the process of translating foreign currency financial statements into U.S. dollars are reported as a component of accumulated other comprehensive loss. Transaction gains and losses reflected in the functional currencies are charged to income or expense at the time of the transaction.

Net transaction gains (losses) from foreign currency contracts recorded in the Consolidated Statements of Comprehensive Loss were immaterial for the fiscal years ended December 31, 2021 and 2020. The only component of other comprehensive loss is currency translation adjustments for all periods presented. No income tax expense was allocated to the currency translation adjustments.

Segments

NextNav operates as one operating segment. NextNav's chief operating decision maker is its Chief Executive Officer, who reviews financial information presented on an entity-wide basis for purposes of making operating decisions, assessing financial performance and allocating resources. Substantially all long-lived tangible assets are located in the United States.

For the year ended December 31, 2021, three customers accounted for 40%, 31%, and 19% of total revenue. For the year ended December 31, 2020, three customers accounted for 53%, 27%, and 18% of total revenue.

Adopted Accounting Pronouncements

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40) ("ASU 2020-06") to simplify accounting for certain financial instruments. ASU 2020-06 eliminates the current models that require separation of beneficial conversion and cash conversion features from convertible instruments and simplifies the derivative scope exception guidance pertaining to equity classification of contracts in an entity's own equity. The new standard also introduces additional disclosures for convertible debt and freestanding instruments that are indexed to and settled in an entity's own equity. ASU 2020-06 amends the diluted earnings per share guidance, including the requirement to use the if-converted method for all convertible instruments. The Company early adopted ASU 2020-06 effective January 1, 2021. The adoption of ASU 2020-06 did not have an impact on the Company's consolidated financial statements.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Recent Accounting Developments Not Yet Adopted

In February 2016, FASB issued ASU 2016-02, Leases (Topic 842) (“ASU 2016-02”), which requires lessees to recognize lease assets and lease liabilities on the Consolidated Balance Sheet for those leases classified as operating leases under current U.S. GAAP. ASU 2016-02 requires that a lessee should recognize a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term on the Consolidated Balance Sheet. The new guidance also requires qualitative and quantitative disclosures related to the nature, timing and uncertainty of cash flows arising from leases. The guidance is effective for the Company’s fiscal year beginning January 1, 2022, with early adoption permitted. The Company will adopt the standard using the modified retrospective transition method as of January 1, 2022 and will not apply the standard to the comparative periods presented in the year of adoption. The Company will use the package of transition practical expedients outlined in the transition guidance. In July 2018, the FASB amended the new lease standard which, among other changes, allows a company to elect to adopt ASU 2016-02 using a transition option whereby a cumulative effect adjustment is recorded to the opening balance of its retained earnings on the adoption date. The Company has elected to use this transition option to record a cumulative effect adjustment to retained earnings as of January 1, 2022.

The Company is currently assessing the impact of the new standard on its financial statements and expects to recognize right-of-use lease assets for operating leases of approximately \$9.2 million to \$9.8 million, related lease liabilities of approximately \$10.2 million to \$10.9 million and cumulative adjustment to opening retained earnings of approximately \$0.3 million to \$0.7 million. The Company’s estimate represents the net present value of lease payments from all lease obligations that are currently classified as operating leases, such as real estate leases for corporate headquarters and site/shelter leases, that commenced on or before January 1, 2022. The Consolidated Statements of Comprehensive Loss and Cash Flows recognition of lease expense are not expected to significantly change from the current methodology.

In June 2016, FASB issued ASU 2016-13, Financial Instruments — Credit Losses (Topic 326) (“ASU 2016-13”), which requires that an entity measure and recognize expected credit losses for financial assets held at amortized cost and replaces the incurred loss impairment methodology in current U.S. GAAP with a methodology that requires consideration of a broader range of information to estimate credit losses. The guidance also modifies the impairment model for available-for-sale debt securities. ASU 2016-13 is effective for the Company’s fiscal year beginning January 1, 2023. The Company is continuing to assess the potential impacts of ASU 2016-13 on its financial statements.

In December 2019, FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes (Topic 740) (“ASU 2019-12”), which is intended to improve consistency and simplify several areas of existing guidance. ASU 2019-12 removes certain exceptions to the general principles related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period, and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 is effective for the Company’s fiscal year beginning January 1, 2022. The Company is evaluating the impact of the adoption of this ASU and does not expect the impact to be material.

Management does not believe that any other recently issued, but not yet effective, accounting standards, if currently adopted, would have a material effect on the Company’s consolidated financial statements.

3. AT&T Agreement

In October 2019, NextNav entered into a series of agreements with AT&T, including an equipment agreement, a service agreement, and a warrant agreement (the “AT&T Agreements”). The AT&T Agreements provide for: (i) AT&T’s marketing and resale of services to FirstNet[®] subscribers and certain pricing requirements for the Company’s software development kits (“SDK”) based on the quantity of usage, revenue sharing, compliance with data rights and privacy, and support requirements; and (ii) AT&T hosting of weather measurement equipment for altitude determination at AT&T sites, at no recurring cost to NextNav for a 7-year lease term. The AT&T Agreements represent a single transaction, as they were all entered into at the same time and in contemplation of each other.

NextNav’s obligations to AT&T under the AT&T Agreements include providing certain equipment to AT&T in exchange for \$0.002 million in cash consideration. NextNav has provided AT&T with certain intellectual property and transition support rights in the event NextNav is unable to continue providing services to AT&T, have significant service outages, or engage in transactions with certain persons.

The equipment provided to AT&T is installed on real estate owned or leased by AT&T. NextNav’s exclusive right to access, use and manage the equipment for 7 years (subject to earlier termination after 3 years in certain circumstances) represents continuing involvement in real estate, and NextNav recognized the failed sale-leaseback under the financing method, with \$4.7 million of equipment provided to AT&T being recorded within property & equipment on the Consolidated Balance Sheet.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The hosting of the equipment at AT&T sites represents an operating lease. The minimum lease payments are comprised of two components, \$5.0 million in cash paid to AT&T and the fair value of the AT&T Holdings Warrants (as defined below) at lease inception. The minimum lease payments incurred prior to lease commencement are recognized as prepaid rent and upon lease commencement are recognized as rent expense over the term of the lease on a straight-line basis.

Further to the above, NextNav issued AT&T certain warrants to purchase 21,221,299 Class D Redeemable Preferred Units at an exercise price of \$2.89 per unit, and in 2020 issued AT&T with additional warrants to purchase 1,910,158 Class D Redeemable Preferred Units under the same terms as the 2019 warrants and 6,947,447 Class A Common Units at an exercise price of \$0.01 per unit (collectively the "AT&T Holdings Warrants"). Under the terms of the AT&T Agreements, there are no current obligations for NextNav to provide any licenses or other services to AT&T until they are requested by AT&T. The AT&T Holdings Warrants are subject to certain vesting conditions including the build of the network and execution of certain future service agreements. Additional lease expense associated with these warrants is recognized in the period that vesting becomes probable. As of December 31, 2020, 60% of the AT&T Holdings Warrants had vested.

The Class D Redeemable Preferred Units warrants are liability awards as they were issued to AT&T in exchange for goods and services and the Class D Redeemable Preferred Units allow for the redemption of the Class D Redeemable Preferred Units upon request of 66.6% of the Class D Preferred Unitholders which is outside the Company's control. For the year ended December 31, 2021 and 2020, the Company recognized \$12.6 million and \$11.0 million, respectively, in changes to the fair value of the Class D Redeemable Preferred Units warrants.

The AT&T Class A Common Units warrants have no redemption features outside the control of NextNav, the underlying units were not classified as liabilities, and there are no contingent events that are probable of occurring which would allow NextNav to settle the awards for cash or other assets. Accordingly, the AT&T Class A Common Units warrants were classified as permanent equity.

In January 2021, certain vesting milestones were achieved, with an additional 30% of the AT&T Holdings Warrants vesting to AT&T. The Company recognized \$5.5 million as lease expense in COGS for the year ended December 31, 2021 related to the 30% vesting.

In June 2021, NextNav entered into an amendment to AT&T Holdings Warrants agreement. The amendment provided that the unvested AT&T Holdings Warrants due to AT&T vest upon the earlier of: i) the achievement of certain milestones, as outlined in the agreement; or ii) a capital transaction. Prior to the amendment, the vesting condition for the unvested AT&T Holdings Warrants were only upon the achievement of certain milestones.

Upon consummation of the Business Combination, the vesting condition for the remaining 10% of the AT&T Holdings Warrants was achieved, and accordingly, the Company recognized an additional \$3.5 million as lease expense in COGS for the year ended December 31, 2021 related to the final 10% vesting. Further, AT&T immediately elected to exchange its fully-vested AT&T Holdings Warrants for a fully-vested warrant to purchase 4,320,133 shares of common stock in NextNav at an exercise price of \$0.01 (the "AT&T Warrant").

The Company determined the exchange represented a modification of the AT&T Holdings Warrants as it occurred in contemplation of the consummation of the Business Combination. The modification resulted in a change in classification of the Class D Redeemable Preferred Units warrants from liability to equity, and accordingly, the Company adjusted the warrant liability immediately before the exchange to its settlement date fair value, and reclassified \$4.4 million from warrant liability to additional paid-in capital. The Class A Common Units warrants were not adjusted for as the modification did not result in a change of classification.

AT&T is entitled to exercise the AT&T Warrant in full (and not in part) at any time prior to October 2039, unless extended pursuant to the terms thereof (the "Exercisability Period"). In the event AT&T does not exercise the AT&T Warrant in full, the AT&T Warrant will be automatically exercised in full one business day prior to the earlier of the consummation of a "change of control" of the Company (as defined in the warrant agreement) or the last day of the Exercisability Period.

AT&T is restricted from transferring (subject to limited exceptions) the AT&T Warrant and any warrant shares for a period of 180 days following October 28, 2021, subject to early termination for 50% of the shares underlying the AT&T Warrant upon exercise of the AT&T Warrant in the event that the closing sale price of the Company's common stock equals or exceeds \$12.00 for 20 out of 30 consecutive trading days commencing at least 60 days after October 28, 2021. Thereafter, any transfer of the AT&T Warrant or the warrant shares will be subject to the Securities Act of 1933.

AT&T will not have the rights or privileges of holders of common stock and any voting rights until it exercises the AT&T Warrant and receive shares of common stock. After the issuance of shares of the common stock upon exercise of the AT&T Warrant, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

4. Property, Equipment, Network Under Construction, and Intangible Assets

Property and equipment and network under construction consisted of the following:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Network under construction	\$ 494	\$ 16,828
TerraPoiNT network	16,620	—
Office equipment, furniture, and leasehold improvements	1,270	1,201
Pinnacle network	6,581	5,767
Accumulated depreciation	(2,714)	(1,262)
Property and equipment, net	<u>\$ 22,251</u>	<u>\$ 22,534</u>

Depreciation expense on property and equipment was \$1.5 million and \$0.1 million for the years ended December 31, 2021 and 2020, respectively.

Network under construction consisted of a tower and rooftop network of beacons with total balances of \$0.5 million and \$16.8 million as of December 31, 2021 and 2020, respectively. There was no depreciation expense on network under construction in 2021 or 2020. No impairment was recorded for the years ended December 31, 2021 or 2020.

Intangible assets consisted of the following:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Indefinite-Lived Intangible assets	\$ 3,467	\$ 3,467
Software	2,432	2,172
Accumulated Amortization	(1,804)	(1,494)
Software, net	<u>628</u>	<u>678</u>

Amortization expense on software was \$0.3 million and \$0.1 million for the years ended December 31, 2021 and 2020, respectively. Software future amortization is expected as follows:

For the twelve months ending December 31, 2022	316
For the twelve months ending December 31, 2023	255
For the twelve months ending December 31, 2024	57

5. Accrued Liabilities

Accrued liabilities consisted of the following:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Accrued salary and other employee liabilities	\$ 2,423	\$ 1,327
Accrued legal and professional services	1,540	968
Accrued cash interest and unfunded fees	—	1,068
Other accrued liabilities	637	198
Total	<u>\$ 4,600</u>	<u>\$ 3,561</u>

6. Debt

In December 2019, Holdings entered into the Financing Agreement under which it could borrow up to \$100.0 million through a senior secured loan facility. An amendment to the Financing Agreement (“First Amendment”) was entered into in January 2020, under which related party investors were added as new lenders bringing the total commitment under the Financing Agreement from \$100.0 million to \$105.3 million, \$65.0 million of which was available to fund operations of Holdings with the rest available to fund costs incurred pursuant to the Financing Agreement, including legal and advisor costs, cash interest and paid-in-kind (“PIK”) interest.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In June 2021, Holdings entered into a second amendment (“Second Amendment”) to the Financing Agreement. Under the terms of the Second Amendment, the amount available to fund the operations of Holdings was increased from \$65.0 million to \$80.0 million, with the remainder available to fund costs incurred pursuant to the Financing Agreement, including legal and advisor costs and cash interest. The total amount committed under the Financing Agreement remained unchanged at \$105.3 million. The Financing Agreement contained loan options of either a reference rate loan with an interest rate floor of 6% or a LIBOR rate loan with an interest rate floor of 5%. Added to the reference rate and LIBOR loans, are applicable margins of 6% and 7%, respectively, resulting in combined interest and applicable margin rates of at least 12% per annum on all loans made pursuant to the Financing Agreement.

In connection with the Business Combination, the Company used a portion of the post-Business Combination proceeds to pay the outstanding balance at October 28, 2021 of \$96.9 million on the Financing Agreement, which represented the full outstanding principal, accrued cash interest and PIK interest, and other applicable fees. As part of the payoff, the Company recorded debt extinguishment costs of \$8.6 million for the unamortized balance of the debt discount and debt issuance costs.

The fair value of the senior secured loan, which is designated as Level 3 in the fair value hierarchy, was \$59.1 million at December 31, 2020.

7. Warrants and Warrant Liability

In addition to the AT&T Warrant described in Note 3, there were 33,784,576 Financing Warrants outstanding prior to the Business Combination, which were exercised by the holders and immediately converted into shares of common stock of NextNav upon consummation of the Business Combination. Upon exercise of the Financing Warrants, NextNav recorded \$174.3 million to additional paid-in capital. Prior to the Business Combination, the Financing Warrants were recorded as a liability, and the Company recorded a \$84.0 million fair value adjustment for the Financing Warrants for the year ended December 31, 2021 prior to their exercise.

As of December 31, 2021, NextNav had 18,875,000 warrants outstanding including: (a) 10,000,000 public warrants sold in connection with Spartacus’ initial public offering (the “Public Warrants”) and (b) 8,750,000 warrants issued to Sponsor in a private placement on the initial public offering closing date (the “Private Placement Warrants”). The Private Placement Warrants are classified as a liability on the Company’s Consolidated Balance Sheet as of December 31, 2021. As of December 31, 2021, the Company recorded \$12.9 million to the Consolidated Statement of Comprehensive Loss as a fair value adjustment for the Private Placement Warrants. Upon consummation of the Business Combination, the terms included in the Public Warrants that initially precluded equity classification were no longer applicable, with the Public Warrants issued during Spartacus’ initial public offering being reclassified from a liability to equity. Accordingly, NextNav reclassified \$17.8 million from warrant liability to additional paid-in capital.

Following the consummation of the Business Combination, holders of the Public Warrants and Private Placement Warrants are entitled to acquire shares of common stock of NextNav. Each whole warrant entitles the registered holder to purchase one share at an exercise price of \$11.50 per share. The Public Warrants and Private Placement Warrants expire five years after the completion of the Business Combination.

NextNav has the right to redeem the outstanding Public Warrants in whole and not in part at a price of \$0.01 per warrant upon a minimum of 30 days’ prior written notice of redemption, if and only if the last sales price of the Company’s common stock matched or exceeded \$18.00 per share for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date on which NextNav sends the notice of redemption to the warrant holders.

The Private Placement Warrants are identical in all respects to the Public Warrants except that, so long as they are held by the Sponsor or its permitted transferees: (i) they will not be redeemable by NextNav; (ii) they may be exercised by the holders on a cashless basis; and (iii) they are subject to registration rights.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

8. Fair Value

NextNav uses observable and unobservable inputs to determine the value of its assets and liabilities recorded at fair value. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect internal market assumptions. The three-tier hierarchy for inputs used to measure fair value, which prioritizes the inputs used in the methodologies of measuring fair value for assets and liabilities, where applicable, is as follows:

- Level 1 — Quoted prices in active markets for identical assets or liabilities
- Level 2 — Observable inputs other than quoted prices in active markets for identical assets and liabilities
- Level 3 — No observable pricing inputs in the market

Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurements. NextNav's assessment of the significance of a particular input to the fair value measurements requires judgment and may affect the valuation of the assets and liabilities being measured and their placement within the fair value hierarchy. NextNav effectuates transfers between levels of the fair value hierarchy, if any, as of the date of the actual circumstance that caused the transfer.

The following table presents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis:

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
	(in thousands)			
December 31, 2021				
Warrants	—	—	\$ 28,875	\$ 28,875
December 31, 2020				
Warrants	—	—	\$ 101,325	\$ 101,325

The carrying values of cash and cash equivalents, accounts payable, accrued expenses, amounts included in other current assets, and current liabilities that meet the definition of a financial instrument, approximate fair value due to their short-term nature.

Assets, liabilities, and equity instruments that are measured at fair value on a nonrecurring basis include fixed assets and intangible assets. The Company recognizes these items at fair value when they are considered to be impaired or upon initial recognition. The fair value of these assets and liabilities are determined with valuation techniques using the best information available and may include quoted market prices, market comparables and discounted cash flow models.

Level 3 Liabilities

The Company engaged a third-party valuation firm to assist with the fair value analysis of the warrants. The analysis used commonly accepted valuation methodologies and best practices to determine the fair value of the equity, in accordance with fair value standards and U.S. GAAP. For the Private Placement Warrants that were outstanding as of December 31, 2021, NextNav used a Monte Carlo simulation model. For the Financing Warrants and the AT&T Warrant outstanding as of December 31, 2020, the Company used Black-Scholes option pricing model, utilizing certain assumptions to allocate the equity value to the warrants at each reporting date. The following table shows the assumptions used in each respective model:

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
	Values	Values
Equity Value	\$ —	\$ 525,034,000
Stock Price	\$ 8.76	\$ —
Strike price	\$ 11.50	\$ —
Holding Period/Term (years)	4.80	3.00
Volatility	52.90%	59.50%
Expected dividends	None	None
Risk-Free Rate	1.23%	0.17%
Fair value of warrants	\$ 3.30	\$ —
Discount for Lack of Marketability	—	10.0%

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The table below provides a reconciliation of the beginning and ending balances for the liabilities measured at fair value using significant unobservable inputs (Level 3).

Warrants:	(in thousands)
Balance as of January 1, 2021	\$ 101,325
Vesting of AT&T Warrant	5,943
Fair value adjustment of AT&T Warrant	(12,555)
Fair value adjustment of Financing Warrants	84,011
Exercise of Financing Warrants	(174,328)
Reclassification of AT&T Warrant to Equity	(4,395)
Private Placement Warrants	16,013
Fair value adjustment of Private Placement Warrants	12,861
Balance as of December 31, 2021	\$ 28,875

9. Common Stock and Convertible Preferred Units

The Consolidated Statements of Changes in Stockholders' Equity reflect the Business Combination as of October 28, 2021. As Holdings was deemed the accounting acquirer in the Business Combination, all periods prior to the consummation date reflect the balances and activity of Holdings. The balances as of December 31, 2021 and 2020 from the financial statements of Holdings as of that date, share activity (redeemable preferred units, common units, additional paid in capital, and accumulated deficit) and per share amounts were retroactively adjusted, where applicable.

Common Stock

In connection with the Business Combination, NextNav amended and restated its certificate of incorporation. As of December 31, 2021, NextNav had authorized the issuance of 600,000,000 shares of capital stock, par value, \$0.0001 per share, consisting of (a) 500,000,000 shares of common stock and (b) 100,000,000 shares of undesignated preferred stock. As of December 31, 2021, NextNav had 96,546,611 shares of common stock issued and outstanding.

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Holdings' Convertible Preferred Units

Below is historical summary information of Class C Redeemable Preferred Units and Class D Redeemable Preferred Units (collectively, Preferred Units) rights of Holdings.

Cumulative Preferred Return — Class C Redeemable Preferred Units and Class D Redeemable Preferred Units were entitled to cumulative preferred return whether or not declared at an annual rate of 8% and 10%, respectively. As of December 31, 2020, the Class C Preferred Units had cumulative undeclared preferred returns of \$6.0 million. As of December 31, 2020, the Class D Redeemable Preferred Units had cumulative undeclared preferred returns of \$146.2 million.

Conversion — Preferred Units were convertible to Class A Common Units at any time at the option of the holder based on a stated conversion ratio. The initial conversion ratio was one Preferred Unit for one Class A Common Unit. The conversion ratio was subject to certain adjustments as defined in Holdings' operating agreement. Preferred Units would automatically convert into Class A Common Units upon (i) in the case of the Class D Redeemable Preferred Units, the affirmative election of the holders of 66 2/3% of the outstanding Class D Redeemable Preferred Units or (ii) in the case of the Class C Redeemable Preferred Units, the affirmative election of the holders of 66 2/3% of the outstanding Class C Redeemable Preferred Units or (iii) a Public Offering (as defined in Holdings' operating agreement) where gross proceeds were at least \$75 million.

Voting — The holders of Preferred Units were entitled to the number of votes equal to the number of common units into which the shares of Preferred Units held by each holder were then convertible. In addition, certain actions required the affirmative approval of 66 2/3% of Class C Redeemable Preferred Units and Class D Redeemable Preferred Units (each voting as a separate class), including liquidation or dissolution of Holdings, creation of a senior class of units, payment of preferred return, increasing the authorized number of Common or Preferred Units, or amendment of Holdings' operating agreement.

Redemption — The Class C Redeemable Preferred Units were redeemable by Holdings, at the request of the majority of the then-outstanding Class C Redeemable Preferred Unit holders, over a three-year period commencing on or after the date upon which no Class D Redeemable Preferred Units were outstanding, at a per unit price of \$0.44, plus any accrued and unpaid preferred return, whether or not declared. The Class D Redeemable Preferred Units were redeemable by Holdings, at the request of the holders of 66 2/3% of the then-outstanding Class D Redeemable Preferred Unit holders, over a three-year period commencing on or after the later of September 1, 2021 and the date that was 91 days after the earlier of December 27, 2026 and the date upon which Holdings' obligations under the Financing Agreement were satisfied in full, provided that in either case neither a qualified offering or a capital transaction had occurred prior to such request, at a per unit price of \$2.13 for units issued in 2012, \$2.56 for units issued in 2014, \$2.89 for units issued in September 2016, and \$5.78 and \$11.56 for units issued in December 2019, plus any accrued and unpaid preferred return, whether or not declared.

Given the redemption rights contained within the Class C Redeemable Preferred Units and the Class D Redeemable Preferred Units, Holdings accounted for the outstanding Preferred Units as mezzanine equity in its Consolidated Balance Sheets. The Class C Redeemable Preferred Units and the Class D Redeemable Preferred Units were initially recorded at fair value, net of transaction costs, at issuance. At each reporting period, the carrying amount was adjusted to equal what the redemption amount would be as if redemption were to occur at the end of the reporting date based on the conditions that exist as of that date. The recorded redemption value of the Preferred Units includes accrued but unpaid dividends. At December 31, 2020, the redemption value of the Class C Redeemable Preferred Units was \$11.9 million, and the redemption value of the Class D Redeemable Preferred Units was \$357.7 million.

In connection with the Business Combination on October 28, 2021, all outstanding units of Holdings' Class C Redeemable Preferred Units and Class D Redeemable Preferred Units converted into 5,365,566 and 42,286,068 shares of common stock of NextNav, respectively, with redemption values of \$11.9 million and \$371.6 million, respectively, retroactively adjusted as a result of the Business Combination.

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

10. Equity-Based Compensation

Holdings Unit Option and Profit Interest Plan

Prior to the Business Combination, Holdings maintained an equity-based compensation plan. Holdings adopted the 2011 Unit Option and Profit Interest Plan, amended in 2020 and 2021 (“Incentive Plan”) for the purpose of granting options, profit interests and common equity units with 21.4 million common units authorized for issuance.

Holdings issued three types of equity instruments under the plan:

- Unit Options — These Unit Awards are granted with strike prices set at fair value on the date of grant, vesting periods of various lengths, but generally over four years, and contractual lives of 10 years.
- Profit Interests Units (“Profit Interests”) — These Unit Awards are granted with profit hurdles set at fair value on the date of grant with vesting periods of various lengths, but generally over four years.
- Series B-4 Units Restricted Units (“B-4s”) — These Unit Awards are granted at fair value on the date of grant, the majority of which are fully vested on the grant date.

On October 21, 2020, Holdings modified the terms for Unit Options and Profit Interests outstanding for current employees and service providers. The modifications to the terms of the Unit Options consisted of reducing the exercise price for Unit Options with remaining contractual lives of at least 7 years. Unit Options with remaining contractual lives of less than 7 years were cancelled and re-granted with 10 year contractual lives and the exercise price was lowered. Further, the modifications to the Profit Interests consisted of lowering the hurdle. No other terms were changed. The modifications resulted in the options to 31 grantees being cancelled and re-granted with a reduced exercise price. Profit hurdles were reduced for 19 Profit Interest holders. The incremental compensation cost recorded by the Company for the year ended December 31, 2020 resulting from the modifications was \$1.5 million.

Each Unit Option from the Incentive Plan that was outstanding prior to the Business Combination, whether vested or unvested, was converted by its terms into an option to acquire a number of shares of common stock of NextNav (each such option, an “Exchanged Option”) equal to the product (rounded down to the nearest whole number) of (i) the number of units of Holdings common units subject to such Unit Option immediately prior to the Business Combination and (ii) the Exchange Ratio (as defined in the Incentive Plan), at an exercise price per unit (rounded up to the nearest whole cent) equal to (A) the exercise price per unit of such Holdings option immediately prior to the consummation of the Business Combination, divided by (B) the exchange ratio. Except as specifically provided in the Merger Agreement, following the Business Combination, each Exchanged Option will continue to be governed by the same terms and conditions (including vesting and exercisability terms) as were applicable to the corresponding to the corresponding former Unit Option immediately prior to the consummation of the Business Combination. As of December 31, 2021, there were Exchanged Options to purchase 1,968,861 shares of common stock of NextNav. All stock unit activity was retroactively restated to reflect the Exchanged Options.

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Upon consummation of the Business Combination and adoption of the Omnibus Plan (as defined below), the Profit Interests and B-4s converted and were retroactively restated in the same manner as the Exchanged Options except that the Profit Interests and B-4s were exchanged for NextNav restricted stock units. All terms and conditions (including vesting and exercisability terms) under the Incentive Plan remained the same following the Business Combination.

NextNav 2021 Omnibus Incentive Plan

In October 2021, the Company adopted the NextNav 2021 Omnibus Incentive Plan (the “Omnibus Plan”). The Omnibus Plan became effective upon consummation of the Business Combination and succeeds the Incentive Plan. Upon adoption of the Omnibus Plan, a total of 12,818,902 shares were approved to be issued as stock options under the Omnibus Plan, of which restricted stock units for 2,741,920 shares were granted under the Omnibus Plan as a transaction grant after the consummation of the Business Combination.

Stock Options Valuation

The Black-Scholes option pricing model requires NextNav to make certain assumptions, including the fair value of the underlying units, the expected term, the expected volatility, the risk-free interest rate, and the dividend yield. The expected term of option awards is calculated as the midpoint between the vesting date and the end of the contractual term. Historical data is not sufficient to reasonably estimate the expected term of new grants. The expected dividend rate of zero is based on the fact that NextNav has not historically paid and does not expect to pay a dividend on its common stock. The risk-free interest rate was based on U.S. Treasury yields for securities with similar terms. Volatility was calculated based on the trading prices for a group of comparable public companies.

Assumptions used in determining the fair value of Stock Options issued each year are as follows:

	Year Ended December 31,	
	2021	2020
Expected volatility	51.21%	59.50%
Expected term (years)	6.25	6.25
Expected dividends	None	None
Risk-free rate	1.34%	0.65%

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes stock option activity under the Omnibus Plan:

	Number of Shares	Weighted Average Exercise Price per Unit <small>(in thousands, except per share data)</small>	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Options outstanding at December 31, 2020	5,622	\$ 0.15	\$ 9.66	\$ 6,481
Recapitalization Impact	(3,604)	0.27		—
Outstanding at December 31, 2020	2,018	\$ 0.42	\$ 9.66	\$ 6,481
Granted	63	5.06	—	—
Cancelled	126	0.34	—	—
Exercised	5	0.10	—	—
Options outstanding at December 31, 2021	1,950	\$ 0.54	\$ 8.51	\$ 16,519
Options exercisable at December 31, 2021	1,146	\$ 0.45	\$ 8.36	\$ 9,526
Options exercisable at December 31, 2020	714	\$ 0.64	\$ 9.47	\$ 2,205
Unvested at December 31, 2021	804	\$ 0.67	\$ 8.73	\$ 6,503
Unvested at December 31, 2020	1,304	\$ 0.32	\$ 9.79	\$ 161

The weighted average grant date fair value of options granted during the years ended December 31, 2021 and 2020 was \$4.83 and \$3.32, respectively. The intrinsic value of options exercised during the years ended December 31, 2021 and 2020 was \$8.5 million and \$0.01 million, respectively.

As of December 31, 2021, the total compensation cost related to nonvested awards not yet recognized was \$2.74 million and the weighted-average period over which it is expected to be recognized was 2.72 years.

Equity-based compensation expense of \$1.2 million and \$1.0 million related to the Omnibus Plan equity awards was recognized during the years ended December 31, 2021 and 2020, respectively.

NEXTNAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Restricted Stock Awards and Restricted Stock Units

The Company's restricted stock awards are comprised of Restricted Stock Awards ("RSAs") and Restricted Stock Units ("RSUs"). The following table summarizes RSA and RSU activity during the year ended December 31, 2021:

	<u>Restricted Stock Units</u>	<u>Restricted Stock Awards</u>	<u>Total Restricted Awards</u>	<u>Weighted- Average Grant-Date Fair Value</u>
	(in thousands, except per share data)			
Units nonvested at January 1, 2021	472	-	472	\$ 1.28
Recapitalization Impact	(304)	-	(304)	2.39
Units nonvested at January 1, 2021	168	-	168	\$ 3.67
Units granted in 2021	2,821	1,070	3,891	9.31
Units vested in 2021	93	-	93	3.77
Units nonvested at December 31, 2021	<u>2,896</u>	<u>1,070</u>	<u>3,966</u>	<u>\$ 9.20</u>

The grant date fair value of RSAs and RSUs granted during the year ended December 31, 2021 was \$36.2 million. The total fair value of RSAs and RSUs vested upon grant and vested during the year ended December 31, 2021 was \$0.4 million.

As of December 31, 2021, the total compensation cost related to RSAs and RSUs not yet recognized was \$36.1 million and the weighted-average period over which it is expected to be recognized was 1.94 years.

Equity-based compensation expense of \$0.5 million related to the RSAs and RSUs was recognized during the year ended December 31, 2021.

11. Commitments and Contingencies

Leases

NextNav leases office space under a non-cancellable lease as well as site leases for towers and shelters under operating leases related to its network under construction. Site leases are entered into throughout the United States under which NextNav receives the rights to install equipment used to transmit its services over its licensed spectrum.

The site leases include options to extend or terminate the lease. NextNav establishes the number of renewal option periods used in determining the operating lease term based upon its assessment at the inception of the operating lease of the number of option periods for which failure to renew the lease imposes a penalty in such amount that renewal appears to be reasonably certain. The option to renew may be automatic, at the option of NextNav or mutually agreed to between the landlord and NextNav. Rent expense is recognized on a straight line basis over the over the operating lease term.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Monthly rent expense includes any site related utility payments or other fees such as administrative or up-front fees contained in the lease agreements that are determinable upon execution of the lease agreement.

The future minimum payments under these operating lease agreements are as follows:

For the Twelve Months Ended December 31,	(in thousands)
2022	\$ 3,335
2023	\$ 2,400
2024	\$ 1,548
2025	\$ 1,109
Thereafter	\$ 1,581

During the years ended December 31, 2021 and 2020, rent expense was \$13.6 million and \$3.8 million, respectively.

Litigation and Legal Matters

From time to time, the Company may be party to litigation and other legal matters incidental to the conduct of its business. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. The Company accrues liabilities for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated. As of December 31, 2021, the Company was not involved in any such matters, individually or in the aggregate, which management believes would have a material adverse effect on the Company's business, financial condition, results of operations, or cash flows.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

12. Income Taxes

As disclosed Note 1, on October 28, 2021 the Company became the owner of Holdings and the various operating subsidiaries of Holdings. Holdings is taxed as a partnership, and as such is generally not subject to federal, state, or local income tax directly. Rather, its members are subject to income taxations based on the member's portion of Holdings' income or loss. Accordingly, in addition to the Company's operating activities, the Company will also incur income taxes on its allocable share of any net taxable income of Holdings.

Holdings' non-operating subsidiary, CommLabs, Inc., is taxed as a U.S. corporation. Holdings, through its subsidiaries, also owns an Indian subsidiary, Commlabs Technology Centre Pvt. Ltd. ("Commlabs India"), which is taxed as a corporation in India and, as such, is subject to Indian entity-level income tax.

U.S. and international components of (loss) income before income taxes were comprised of the following for the periods indicated:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
United States	(144,811)	(137,431)
Foreign	197	133
Total	\$ (144,614)	\$ (137,298)

The (benefit from) provision for income taxes consisted of the following for the periods indicated:

	Year Ended December 31,	
	2021	2020
	(in thousands)	
Provision (benefit) for income taxes:		
Current:		
Federal	\$ —	\$ —
State	—	—
Foreign	52	38
Total current	52	38
Deferred:		
Federal	—	—
State	—	—
Foreign	—	—
Total deferred	—	—
Provision (benefit) for income taxes:	52	38

The benefit from or provision for income taxes differs from the amount computed by applying the federal statutory income tax rate to the Company's loss or income before income taxes as follows for the periods indicated:

	Year Ended December 31,	
	2021	2020
Income Tax Expense at Federal Statutory Rate	21.0%	21.0%
Permanent items	(1.87)%	0.00%
State taxes, net of federal tax effect	1.85%	0.0%
Book income not subject to tax	(3.63)%	(21.03)%
Change in Valuation Allowance	(17.39)%	0.00%
Other permanent differences	0.0%	0.00%
Effective income tax rate	(0.04)%	(0.03)%

The change in the Company's effective tax rate in 2021, as compared to the prior year, was primarily due to the change in pre-tax book income earned by Commlabs India. Additionally, the difference in the Company's effective tax rate to the statutory rate is driven the income earned in 2021 prior to the Business Combination which is not subject to tax and the need for a full valuation allowance.

NEXTRAV INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2021, the Company has accumulated undistributed earnings generated by Commlabs India of approximately \$0.9 million. Because all of these earnings have previously been subject to the one-time transition tax on foreign earnings required by the Tax Cuts and Jobs Act of 2017, any additional taxes due with respect to such earnings or the excess of the amount for financial reporting over the tax basis of the Company's foreign investments would generally be limited to foreign and state taxes. The Company intends, however, to indefinitely reinvest these earnings and expects future U.S. cash generation to be sufficient to meet future U.S. cash needs.

Deferred income taxes reflect the net tax effects of the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities were as follows for the periods indicated:

	Year Ended	
	December 31,	
	2021	2020
	(in thousands)	
Deferred tax assets, net		
Net operating loss carryforwards	\$ 8,657	\$ 1,861
Stock Compensation	384	—
Basis in underlying investments	65,810	—
Gross deferred tax assets	\$ 74,850	\$ 1,861
Valuation allowance	(74,850)	(1,861)
Deferred tax assets, net of valuation allowance	—	—
Deferred tax liabilities	—	—
Total deferred tax liabilities	—	—
Total net deferred tax (liability) asset	\$ —	\$ —

Management assesses the available positive and negative evidence to estimate whether sufficient future taxable income will be generated to permit use of the existing deferred tax assets ("DTA"). A significant piece of objective negative evidence evaluated was the cumulative loss incurred over the three-year period ended December 31, 2021. Such objective evidence limits the ability to consider other subjective evidence, such as the Company's projections for future growth.

On the basis of this evaluation, as of December 31, 2021, a full valuation allowance of \$74.9 million has been recorded because management has concluded that it is more likely than not that such DTA will ultimately not be realized. The amount of the DTA considered realizable, however, could be adjusted in future years if estimates of future taxable income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight is given to subjective evidence such as our projections for growth.

As of December 31, 2020, and 2021, the Company did not have any unrecognized income tax benefits.

The Company has U.S. income tax net operating loss ("NOL") carryforwards of \$37.6 million and \$7.2 million as of December 31, 2021 and 2020, respectively. \$3.5 million of the NOL's are expected to expire beginning in 2027 while the remaining \$31.8M can be carried forward indefinitely. The Company's NOLs in the U.S. may be limited under Section 382 of the Internal Revenue Code ("IRC"). NOLs are limited when there is a significant ownership change as defined by the IRC Section 382. At this time, the Company expects that none of its federal NOLs will expire unutilized as a result of a limitation under Section 382.

The Company had no state or foreign NOLs as of December 31, 2020. As of December 31, 2021, the Company had no foreign NOLs and \$0.7 million amount of state NOLs, which will begin to expire in 2027.

The Company is subject to taxation in the United States, various states within the United States, and India. Each jurisdiction has its own statute of limitations for making assessment of additional tax liabilities. As of December 31, 2021, due to its net operating losses, all of the Company's tax years remained open for U.S. Federal and state income tax purposes. India has a 4-year statute of limitations, so years prior to 2017 are closed.

13. Retirement Plan

NextNav sponsors a defined contribution benefit plan to provide retirement benefits for its employees. Participants may make voluntary contributions not to exceed maximum allowable contribution amounts. NextNav made discretionary contributions and matching contributions, totaling \$0.3 million and \$0.2 million for the years ended December 31, 2021 and 2020, respectively.

14. Subsequent Events

The Company has completed an evaluation of all subsequent events through the date of this Annual Report on Form 10-K to ensure that these financial statements include appropriate disclosure of events both recognized in the financial statements and events which occurred but were not recognized in the financial statements. The Company has concluded that no subsequent event has occurred that require disclosure.

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

The summary of the general terms and provisions of the registered securities of NextNav Inc. ("NextNav," the "Company," "us," "we," or "our") set forth below does not purport to be complete and is subject to and qualified in its entirety by reference to our amended and restated certificate of incorporation (our "charter") and our bylaws (our "bylaws"), each of which is incorporated by reference as an exhibit to this Annual Report on Form 10-K filed with the Securities and Exchange Commission, of which this Exhibit 4.5 is a part. We encourage you to read our charter and bylaws and the applicable provisions of the General Corporation Law of the State of Delaware (the "DGCL") for additional information.

As of December 31, 2021, our authorized capital stock consisted of 500,000,000 shares of common stock, par value \$0.0001 per share ("Common Stock"), and 100,000,000 shares of undesignated preferred stock, par value \$0.0001 per share (the "preferred stock").

Common Stock

Dividend Rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, holders of outstanding shares of Common Stock are entitled to receive dividends and other distributions (payable in cash, property or our capital stock) when, as and if declared thereon by our board of directors (the "Board") from time to time out of any assets or funds legally available therefore and shall share equally on a per share basis in such dividends and distributions.

Voting Rights

Except as otherwise required by law or our charter (including any preferred stock designation), (i) the holders of Common Stock possess all voting power with respect to the Company and (ii) each outstanding share of Common Stock entitles the holder to one vote on any matter properly submitted to the stockholders.

Preemptive Rights

Holders of outstanding shares of our Common Stock are not entitled to preemptive or other similar subscription rights to purchase any of our securities.

Conversion or Redemption Rights

Our Common Stock is neither convertible nor redeemable.

Liquidation Rights

Subject to applicable law and the rights, if any, of the holders of any outstanding series of the preferred stock upon our liquidation, the holders of our Common Stock shall be entitled to receive all of our remaining assets available for distribution to our stockholders, ratably in proportion to the number of shares of our Common Stock held by each stockholder.

Preferred Stock

Our Board may, without further action by our stockholders, from time to time, direct the issuance of up to 100,000,000 shares of preferred stock in one or more series and may, at the time of issuance, fix the voting powers, if any, and determine the designations, powers, preferences, and relative, participating, optional, special and other rights, if any, of each such series and any qualifications, limitations and restrictions thereof. Accordingly, our Board, without stockholder approval, may issue preferred stock with voting, conversion, or other rights that could adversely affect the voting power and other rights of the holders of our Common Stock. Preferred stock could be issued quickly with terms calculated to delay or prevent a change of control or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our Common Stock, may adversely affect the voting and other rights of the holders of our Common Stock, and could have the effect of delaying, deferring or preventing a change of control of us or other corporate action.

Warrants

As of March 18, 2022, we have registered warrants outstanding exercisable, at a price per share of \$11.50, for a total of 18,750,000 shares of our Common Stock: (a) 10,000,000 of such warrants were issued in registered form under a warrant agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us (the “public warrants”), and (b) 8,750,000 of such warrants were issued in a private placement transaction. The warrant agreement provides that the terms of the public warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval by the holders of at least the majority of the then outstanding public warrants to make any change that adversely affects the interests of the registered holders of such public warrants. The warrants expire on October 28, 2026 (five years after completion of the previously disclosed business combination consummated on October 28, 2021), at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

We are not obligated to deliver any shares of our Common Stock pursuant to the exercise for cash of a warrant, and have no obligation to settle such warrant exercise unless a registration statement under the Securities Act of 1933, as amended (the “Securities Act”), with respect to the shares of our Common Stock underlying the warrants is then effective and a prospectus relating thereto is current. No warrant will be exercisable and we will not be obligated to issue shares of our Common Stock upon exercise of a warrant unless our Common Stock issuable upon such warrant exercise has been registered, qualified or deemed to be exempt from the registration or qualifications requirements of the securities laws of the state of residence of the registered holder of the warrants.

We may call the warrants for redemption:

- in whole and not in part;
- at a price of \$0.01 per warrant;
- upon not less than 30 days’ prior written notice of redemption to each warrant holder; and
- if, and only if, the reported last sale price of our Common Stock (or the closing bid price of our Common Stock in the event shares of our Common Stock are not traded on any specific day) equals or exceeds \$18.00 per share for any 20 trading days within a 30 trading day period ending three trading days before we send the notice of redemption to the warrant holders.

If and when the warrants become redeemable by the Company, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws.

We have established the last of the redemption criterion discussed above to prevent a redemption call unless there is at the time of the call a significant premium to the warrant exercise price. If the foregoing conditions are satisfied and we issue a notice of redemption of the warrants, each warrant holder will be entitled to exercise its warrant prior to the scheduled redemption date. However, the price of our Common Stock may fall below the \$18.00 redemption trigger price as well as the \$11.50 (for whole shares) warrant exercise price after the redemption notice is issued.

If we call the warrants for redemption as described above, our management will have the option to require any holder that wishes to exercise its warrant to do so on a “cashless basis.” In determining whether to require all holders to exercise their warrants on a “cashless basis,” our management will consider, among other factors, our cash position, the number of warrants that are outstanding and the dilutive effect on our securityholders of issuing the maximum number of shares of our Common Stock issuable upon the exercise of the warrants. If our management takes advantage of this option, all holders of warrants would pay the exercise price by surrendering their warrants for that number of shares of our Common Stock equal to the quotient obtained by dividing (x) the product of the number of shares of our Common Stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the “fair market value” (defined below) by (y) the fair market value. The “fair market value” shall mean the average reported last sale price of our Common Stock for the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants.

If our management takes advantage of this option, the notice of redemption will contain the information necessary to calculate the number of shares of our Common Stock to be received upon exercise of the warrants, including the “fair market value” in such case. Requiring a cashless exercise in this manner will reduce the number of shares to be issued and thereby lessen the dilutive effect of a warrant redemption. If we call the warrants for redemption and our management does not take advantage of this option, Spartacus Acquisition Corporation’s sponsor and its permitted transferees would still be entitled to exercise its warrants for cash or on a cashless basis using the same formula described above that other warrant holders would have been required to use had all warrant holders been required to exercise their warrants on a cashless basis, as described in more detail below.

A holder of a warrant may notify us in writing in the event it elects to be subject to a requirement that such holder will not have the right to exercise such warrant, to the extent that after giving effect to such exercise, such person (together with such person’s affiliates), to the warrant agent’s actual knowledge, would beneficially own in excess of 9.8% (or such other amount as a holder may specify) of the shares of our Common Stock outstanding immediately after giving effect to such exercise.

If the number of outstanding shares of our Common Stock is increased by a stock dividend payable in shares of our Common Stock, or by a split-up of shares of our Common Stock or other similar event, then, on the effective date of such stock dividend, split-up or similar event, the number of shares of our Common Stock issuable on exercise of each warrant will be increased in proportion to such increase in the outstanding shares of our Common Stock. A rights offering to holders of our Common Stock entitling holders to purchase shares of our Common Stock at a price less than the fair market value will be deemed a stock dividend of a number of shares of our Common Stock equal to the product of (i) the number of shares of our Common Stock actually sold in such rights offering (or issuable under any other equity securities sold in such rights offering that are convertible into or exercisable for our Common Stock) multiplied by (ii) one (1) minus the quotient of (x) the price per share of our Common Stock paid in such rights offering divided by (y) the fair market value. For these purposes (i) if the rights offering is for securities convertible into or exercisable for our Common Stock, in determining the price payable for our Common Stock, there will be taken into account any consideration received for such rights, as well as any additional amount payable upon exercise or conversion and (ii) fair market value means the volume weighted average price of our Common Stock as reported during the 10 trading day period ending on the trading day prior to the first date on which the shares of our Common Stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive such rights.

In addition, if we, at any time while the warrants are outstanding and unexpired, pay a dividend or make a distribution in cash, securities or other assets to the holders of our Common Stock on account of such shares of our Common Stock (or other shares of our capital stock into which the warrants are convertible), other than (a) as described above or (b) certain ordinary cash dividends, then the warrant exercise price will be decreased, effective immediately after the effective date of such event, by the amount of cash and/or the fair market value of any securities or other assets paid on each share of Common Stock in respect of such event.

If the number of outstanding shares of our Common Stock is decreased by a consolidation, combination, reverse stock split or reclassification of shares of our Common Stock or other similar event, then, on the effective date of such consolidation, combination, reverse stock split, reclassification or similar event, the number of shares of our Common Stock issuable on exercise of each warrant will be decreased in proportion to such decrease in outstanding shares of our Common Stock.

Whenever the number of shares of our Common Stock purchasable upon the exercise of the warrants is adjusted, as described above, the warrant exercise price will be adjusted by multiplying the warrant exercise price immediately prior to such adjustment by a fraction (x) the numerator of which will be the number of shares of our Common Stock purchasable upon the exercise of the warrants immediately prior to such adjustment, and (y) the denominator of which will be the number of shares of our Common Stock so purchasable immediately thereafter.

In case of any reclassification or reorganization of the outstanding shares of our Common Stock (other than those described above or that solely affects the par value of such shares of our Common Stock), or in the case of any merger or consolidation of us with or into another corporation (other than a consolidation or merger in which we are the continuing corporation and that does not result in any reclassification or reorganization of our outstanding shares of Common Stock), or in the case of any sale or conveyance to another corporation or entity of the assets or other property of us as an entirety or substantially as an entirety in connection with which we are dissolved, the holders of the warrants will thereafter have the right to purchase and receive, upon the basis and upon the terms and conditions specified in the warrants and in lieu of the shares of our Common Stock immediately theretofore purchasable and receivable upon the exercise of the rights represented thereby, the kind and amount of shares of stock or other securities or property (including cash) receivable upon such reclassification, reorganization, merger or consolidation, or upon a dissolution following any such sale or transfer, that the holder of the warrants would have received if such holder had exercised their warrants immediately prior to such event. If less than 70% of the consideration receivable by the holders of our Common Stock in such a transaction is payable in the form of our Common Stock in the successor entity that is listed for trading on a national securities exchange or is quoted in an established over-the-counter market, or is to be so listed for trading or quoted immediately following such event, and if the registered holder of the warrant properly exercises the warrant within thirty days following public disclosure of such transaction, the warrant exercise price will be reduced as specified in the warrant agreement based on the Black-Scholes value (as defined in the warrant agreement) of the warrant.

The warrants may be exercised upon surrender of the warrant certificate on or prior to the expiration date at the offices of the warrant agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price (or on a cashless basis, if applicable), by certified or official bank check payable to us, for the number of warrants being exercised. The warrant holders will not have the rights or privileges of holders of our Common Stock and any voting rights until they exercise their warrants and receive shares of our Common Stock. After the issuance of shares of our Common Stock upon exercise of the warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Warrants may be exercised only for a whole number of shares of our Common Stock. No fractional shares will be issued upon exercise of the warrants. If, upon exercise of the warrants, a holder would be entitled to receive a fractional interest in a share, we will, upon exercise, round down to the nearest whole number of shares of our Common Stock to be issued to the warrant holder.

We have agreed that, subject to applicable law, any action, proceeding or claim against us arising out of or relating in any way to the warrant agreement will be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and we irrevocably submit to such jurisdiction, which jurisdiction will be the exclusive forum for any such action, proceeding or claim. This provision applies to claims under the Securities Act but does not apply to claims under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or any claim for which the federal district courts of the United States of America are the sole and exclusive forum.

Anti-Takeover Effects of our Charter and Bylaws

Our charter, bylaws and the DGCL contain provisions, which are summarized in the following paragraphs, that are intended to enhance the likelihood of continuity and stability in the composition of our Board. These provisions are intended to avoid costly takeover battles, reduce our vulnerability to a hostile change of control and enhance the ability of our Board to maximize stockholder value in connection with any unsolicited offer to acquire us. However, these provisions may have an anti-takeover effect and may delay, deter or prevent a merger or acquisition of us by means of a tender offer, a proxy contest or other takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the prevailing market price for the shares of our Common Stock held by stockholders.

These provisions include:

Special Meetings of Stockholders

Our charter and bylaws provide that, subject to applicable law and the rights, if any, of the holders of any outstanding series of the preferred stock, special meetings of our stockholders may be called only by the chairman of our Board, our chief executive officer, or our Board pursuant to a resolution adopted by a majority of the Board. Our bylaws also prohibit the conduct of any business at a special meeting other than as specified in the notice for such meeting. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of the Company.

Advance Notice Procedures

Our bylaws establish an advance notice procedure for stockholders' proposals to be brought before an annual meeting, including proposed nominations of persons for election to our Board. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our Board or by a stockholder who was a stockholder of record entitled to vote at such annual meeting on the date of the giving of the notice and on the record date for the meeting, who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Additionally, our bylaws provide that if the stockholder does not appear at the annual meeting of stockholders to present the proposed business, such proposed business shall not be transacted, notwithstanding that proxies in respect of such matter may have been received by us. Although our bylaws will not give our Board the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.

Removal of Directors; Vacancies

Our charter and bylaws provide that, subject to the rights of any holders of any class or series of capital stock then outstanding, any or all of the directors may be removed from office, with or without cause, by the affirmative vote of holders of at least two-thirds (2/3) of the voting power of all then outstanding shares of capital stock entitled to vote generally in the election of directors, voting together as a single class.

In addition, our bylaws provide that, subject to the rights granted to one or more series of preferred stock then outstanding, any newly created directorship on our Board that results from an increase in the number of directors and any vacancies on our Board resulting from death, resignation, retirement, disqualification, removal or other cause may be filled solely and exclusively by a majority vote of the remaining directors then in office, even if less than a quorum, by a sole remaining director (and not by stockholders).

Supermajority Approval Requirements

Our charter and bylaws provide that our Board is expressly authorized to adopt, amend, alter or repeal our bylaws without any action on the part of the stockholders, subject to limited exceptions. The affirmative vote of a majority of the Board shall be required to adopt, amend, alter or repeal the bylaws. The bylaws also may be adopted, amended, altered or repealed by the affirmative vote of the holders of at least two-thirds (2/3) of the voting power of all of the then-outstanding shares entitled to vote on the election of directors, in addition to any vote of the holders of any class or series of capital stock required by law (or any preferred stock designation).

The DGCL provides generally that the affirmative vote of a majority of the outstanding shares entitled to vote thereon, voting together as a single class, is required to amend a corporation's certificate of incorporation, unless the certificate of incorporation requires a greater percentage.

Our charter provides that, in addition to any vote of the holders of any class or series of our stock required by law or by the charter, the affirmative vote of the holders of at least two-thirds (2/3) of the voting power of all of the then-outstanding shares entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend Article V (Board of Directors), Article VI (Bylaws), Article VII (Special Meeting of Stockholders; Action by Written Consent), Article VIII (Limited Liability; Indemnification), Article IX (Amendment of the Amended and Restated Certificate of Incorporation) or Article X (Exclusive Forum from Certain Lawsuits; Consent to Jurisdiction) of the charter; *provided*, that if two-thirds (2/3) of the Board has approved such amendment or repeal or adoption, then only the affirmative vote of the holders of at least a majority of the voting power of all of the then-outstanding shares entitled to vote generally in the election of directors shall be required to amend or repeal, or adopt any provision inconsistent with, the Articles listed in this sentence.

Authorized but Unissued Shares

Delaware law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of Nasdaq, which would apply if and so long as our Common Stock is listed on Nasdaq, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of our Common Stock. Additional shares that may be issued in the future may be used for a variety of corporate purposes, including future public offerings, to raise additional capital, to facilitate acquisitions and for employee benefit plans.

One of the effects of the existence of unissued and unreserved Common Stock may be to enable our Board to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of management and possibly deprive stockholders of opportunities to sell their shares at prices higher than prevailing market prices.

Business Combinations

We are and will continue to be subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that the person becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation’s voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions: (1) before the stockholder became an interested stockholder, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; (2) upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and certain employee stock plan; or (3) at or after the time the stockholder became an interested stockholder, the business combination was approved by the board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Under certain circumstances, Section 203 of the DGCL will make it more difficult for a person who would be an “interested stockholder” to effect various business combinations with us for a three-year period. This provision may encourage companies interested in acquiring us to negotiate in advance with our Board because the stockholder approval requirement would be avoided if our Board approves either the business combination or the transaction which results in the stockholder becoming an interested stockholder. These provisions also may have the effect of preventing changes in our Board and may make it more difficult to accomplish transactions which stockholders may otherwise deem to be in their best interests.

Dissenters’ Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders will have appraisal rights in connection with a merger or consolidation of us. Pursuant to the DGCL, stockholders who properly request and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Delaware Court of Chancery.

Stockholders’ Derivative Actions

Under the DGCL, any of our stockholders may bring an action in our name to procure a judgment in our favor, also known as a derivative action, provided that the stockholders bringing the action is a holder of our shares at the time of the transaction to which the action relates or such stockholders’ stock thereafter devolved by operation of law.

Exclusive Forum

Our charter provides that, unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim against us or any director, officers or employees arising pursuant to any provision of the DGCL, our charter, or our bylaws or (4) any action asserting a claim against us, our directors, officers or employees that is governed by the internal affairs doctrine and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder's counsel, except for, as to each of (1) through (4) above, any action (A) as to which the Court of Chancery in the State of Delaware determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or (C) for which the Court of Chancery does not have subject matter jurisdiction. Notwithstanding the foregoing, (i) the exclusive forum provisions will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction and (ii) unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act or the rules and regulations promulgated thereunder. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Limitations on Liability and Indemnification of Officers and Directors

The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties, subject to certain exceptions. Our charter includes a provision that eliminates the personal liability of directors for monetary damages for any breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL. The effect of these provisions will be to eliminate the rights of us and our stockholders, through stockholders' derivative suits on our behalf, to recover monetary damages from a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior. However, exculpation will not apply to any director if the director has acted in bad faith, knowingly or intentionally violated the law, authorized illegal dividends or redemptions or derived an improper benefit from his or her actions as a director.

Our bylaws provide that we must indemnify and advance expenses to our directors and officers to the fullest extent authorized by the DGCL and our charter and we have entered into indemnification agreements with each of our officers and directors, which require us to indemnify our directors and officers for expenses (including, without limitation, attorneys' fees, judgments, fines, ERISA excise taxes and penalties and amounts paid in settlement) in any action or proceeding arising out of their services as one of our directors or officers or as a director or officer of any other company or enterprise to which the person provides services at our request. We also are expressly authorized to carry directors' and officers' liability insurance providing indemnification for our directors, officers and certain employees for some liabilities. We believe that these indemnification and advancement provisions and insurance will be useful to attract and retain qualified directors and officers.

The limitation of liability, indemnification and advancement provisions included in our charter and bylaws and the indemnification agreements may discourage stockholders from bringing a lawsuit against directors for breaches of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

There is currently no pending material litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is Continental Stock Transfer & Trust Company. The transfer agent's address is 1 State Street, 30th Floor, New York, New York 10004.

Listing

Our Common Stock and warrants are listed Nasdaq under the symbols "NN" and "NNAVW," respectively.

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (this “*Agreement*”), dated as of October 28, 2021, is made and entered into by and among NextNav Inc. (f/k/a Spartacus Acquisition Shelf Corp.), a Delaware corporation (the “*Company*”), B. Riley Principal Investments, LLC, a Delaware limited liability company (“*B. Riley*”), Spartacus Sponsor LLC, a Delaware limited liability company (the “*Sponsor*”), the transferees of the Sponsor listed on the signature pages hereto (the “*Transferee Investors*” and together with the Sponsor and B. Riley, the “*Initial Investors*”), each of the investors listed on the signature pages hereto under the caption “NextNav Investors” (collectively, the “*NextNav Investors*,” and together with the NextNav Investors, Initial Investors and any person or entity who hereafter becomes a party to this Agreement pursuant to Section 6.2 of this Agreement, a “*Holder*” and collectively the “*Holder*s”) and the FF Beneficial Investor (as defined herein).

RECITALS

WHEREAS, on August 20, 2020, pursuant to a Securities Subscription Agreement, the Sponsor purchased an aggregate of 7,187,500 shares (the “*Founder Shares*”) of the Class B common stock, par value \$0.0001 per share, of Spartacus Acquisition Corporation (the “*SPAC*”), of which 2,187,500 Founder Shares were forfeited to the SPAC for no consideration;

WHEREAS, the Founder Shares were convertible into shares of the SPAC’s Class A common stock, par value \$0.0001 per share (the “*SPAC Common Stock*”), on the terms and conditions provided in the SPAC’s amended and restated certificate of incorporation;

WHEREAS, on October 19, 2020, simultaneously with the closing of the SPAC’s initial public offering, the Sponsor purchased 8,104,244 warrants to purchase shares of the SPAC Common Stock (the “*Sponsor Private Placement Warrants*”), and B. Riley purchased 645,756 warrants to purchase shares of the SPAC Common Stock (the “*B. Riley Private Placement Warrants*” and together with the Sponsor Private Placement Warrants, the “*Private Placement Warrants*”);

WHEREAS, on October 15, 2020, the SPAC and the Initial Investors entered into a Registration and Shareholder Rights Agreement (the “*Original Registration Agreement*”), pursuant to which the SPAC granted the Initial Investors certain registration rights with respect to certain securities of the SPAC;

WHEREAS, prior to the date hereof, the Sponsor transferred to the Transferee Investors certain of the Sponsor’s Founder Shares and Private Placement Warrants and in connection therewith assigned to the Transferee Investors its right and obligations under the Original Registration Agreement with respect to such transferred Founder Shares and Private Placement Warrants;

WHEREAS, on the date hereof, certain other investors (such other investors, collectively, the “*Third-Party Investor Stockholders*”) purchased an aggregate of 20,500,000 shares of SPAC Common Stock in a transaction exempt from registration under the Securities Act (as defined herein) pursuant to the respective Subscription Agreement, each dated as of June 9, 2021, entered into by and among the Company, the SPAC and each of the Third-Party Investor Stockholders (each, a “*Subscription Agreement*” and, collectively, the “*Subscription Agreements*”);

WHEREAS, on the date hereof, upon the closing (the “*Closing*”) of the transactions (such transactions, the “*Transactions*,” and the date of such closing, the “*Closing Date*”) contemplated by that certain Agreement and Plan of Merger, dated as of June 9, 2021 (the “*Transaction Agreement*”), by and among the Company, the SPAC, NextNav Holdings, LLC, a Delaware limited liability company (“*Holdings*”), and the other entities named therein, (i) the Company issued shares of its common stock, par value \$0.0001 per share (the “*Common Stock*”), to, among others, the Sponsor in exchange for the Founder Shares and to the NextNav Investors in exchange for their equity interests in Holdings, as further described in the Transaction Agreement (such Common Stock issued to Sponsor in exchange for the Founder Shares and to the NextNav Investors in exchange for their equity interests in Holdings, the “*Transaction Shares*”), and (ii) the Private Placement Warrants by their terms became exercisable for shares of Common Stock, in each case, on the terms and subject to the conditions set forth in the Transaction Agreement; and

WHEREAS, the Company and the Holders desire to enter into this Agreement, pursuant to which the Company shall grant the Holders certain registration rights with respect to certain securities of the Company as set forth in this Agreement.

NOW, THEREFORE, in consideration of the representations, covenants and agreements contained herein, and certain other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

ARTICLE I
DEFINITIONS

1.1 Definitions. The terms defined in this Article I shall, for all purposes of this Agreement, have the respective meanings set forth below:

“**Adverse Disclosure**” shall mean any public disclosure of material non-public information, which disclosure, in the good faith judgment of the Chief Executive Officer or principal financial officer of the Company, after consultation with counsel to the Company, (i) would be required to be made in any Registration Statement or Prospectus in order for the applicable Registration Statement or Prospectus not to contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements contained therein (in the case of any prospectus and any preliminary prospectus, in the light of the circumstances under which they were made) not misleading, (ii) would not be required to be made at such time if the Registration Statement were not being filed, and (iii) the Company has a bona fide business purpose for not making such information public.

“**Agreement**” shall have the meaning given in the Preamble.

“**Applicable Lock-Up Period**” shall have the meaning given in Section 5.1.

“**Block Trade**” shall have the meaning given in Section 2.4.1.

“**Board**” shall mean the Board of Directors of the Company.

“**B. Riley**” shall have the meaning given in the Preamble.

“**B. Riley Private Placement Warrants**” shall have the meaning given in the Recitals hereto.

“**Closing Date**” shall have the meaning given in the Recitals hereto.

“**Commission**” shall mean the Securities and Exchange Commission.

“**Common Stock**” shall have the meaning given in the Recitals hereto.

“**Company**” shall have the meaning given in the Preamble, and includes the Company’s successors by recapitalization, merger, consolidation, spin-off, reorganization or similar transaction.

“**Demanding Holder**” shall have the meaning given in Section 2.1.3.

“**Effectiveness Deadline**” shall have the meaning given in Section 2.1.1.

“**Exchange Act**” shall mean the Securities Exchange Act of 1934, as it may be amended from time to time.

“**FF Beneficial Investor**” means Future Fund Investment Company No.3 Pty Ltd (ACN 134 338 882).

“**FF Investor**” means The Northern Trust Company (ABN 62 126 279 918), a company incorporated in the State of Illinois in the United States of America, in its capacity as custodian for the FF Beneficial Investor.

“**FF Permitted Transferee**” means (i) the Future Fund Board of Guardians; (ii) any person controlling, controlled by, or under common control with, the Future Fund Board of Guardians; (iii) the trustee of a trust in which all or substantially all of the beneficial interests are held directly or indirectly by the Future Fund Board of Guardians; (iv) any person controlling, controlled by, or under common control with, the Future Fund Board of Guardians; or (v) any custodian for any of the foregoing persons listed in (i)-(iv).

“**Filing Deadline**” shall have the meaning given in [Section 2.1.1](#).

“**Form S-1 Shelf**” shall have the meaning given in [Section 2.1.1](#).

“**Form S-3 Shelf**” shall have the meaning given in [Section 2.1.1](#).

“**Founder Shares**” shall have the meaning given in the Recitals hereto.

“**Holder Information**” shall have the meaning given in [Section 4.1.2](#).

“**Holders**” shall have the meaning given in the Preamble.

“**Maximum Number of Securities**” shall have the meaning given in [Section 2.1.4](#).

“**Minimum Takedown Threshold**” shall have the meaning given in [Section 2.1.3](#).

“**Misstatement**” shall mean an untrue statement of a material fact or an omission to state a material fact required to be stated in a Registration Statement or Prospectus, or necessary to make the statements in a Registration Statement or Prospectus (in the light of the circumstances under which they were made) not misleading.

“**Permitted Transferees**” shall mean any person or entity to whom a Holder of Registrable Securities is permitted to transfer such Registrable Securities prior to the expiration of the Applicable Lock-Up Period pursuant to [Section 5.2](#).

“**Piggyback Registration**” shall have the meaning given in [Section 2.2.1](#).

“**Private Placement Warrants**” shall have the meaning given in the Recitals hereto.

“**Prospectus**” shall mean the prospectus included in any Registration Statement, as supplemented by any and all prospectus supplements and as amended by any and all post-effective amendments and including all material incorporated by reference in such prospectus.

“**Registrable Securities**” shall mean (a) any outstanding shares of Common Stock or any other equity security (including warrants to purchase shares of Common Stock and shares of Common Stock issued or issuable upon the exercise of any other equity security) of the Company held by a Holder immediately following the Closing (including any securities distributable pursuant to the Transaction Agreement), (b) any outstanding shares of Common Stock or any other equity security (including warrants to purchase shares of Common Stock and shares of Common Stock issued or issuable upon the exercise of any other equity security) of the Company acquired by a Holder following the date hereof to the extent that such securities are “restricted securities” (as defined in Rule 144) or are otherwise held by an “affiliate” (as defined in Rule 144) of the Company, and (c) any other equity security of the Company or any of its subsidiaries issued or issuable with respect to any securities referenced in clause (a) or (b) above by way of a stock dividend or stock split or in connection with a recapitalization, merger, consolidation, spin-off, reorganization or similar transaction; *provided, however*, that, as to any particular Registrable Security, such securities shall cease to be Registrable Securities upon the earliest to occur of: (A) a Registration Statement with respect to the sale of such securities shall have become effective under the Securities Act and such securities shall have been sold, transferred, disposed of or exchanged in accordance with such Registration Statement by the applicable Holder; (B) such securities shall have been otherwise transferred, new certificates for such securities not bearing a legend restricting further transfer shall have been delivered by the Company and subsequent public distribution of such securities shall not require registration under the Securities Act; (C) such securities shall have ceased to be outstanding; (D) such securities (i) may be sold without registration pursuant to Rule 144 or any successor rule promulgated under the Securities Act (but with no volume or other restrictions or limitations including as to manner or timing of sale) and (ii) the holder of such securities has beneficial ownership of less than 5% of the outstanding Common Stock; and (E) such securities have been sold to, or through, a broker, dealer or underwriter in a public distribution or other public securities transaction. For the purposes of the immediately preceding sentence, “beneficial ownership” shall be determined in accordance with Section 13(d) of the Exchange Act and Rule 13d-3 thereunder.

“**Registration**” shall mean a registration, including any related Shelf Takedown, effected by preparing and filing a registration statement, prospectus or similar document in compliance with the requirements of the Securities Act, and the applicable rules and regulations promulgated thereunder, and such registration statement becoming effective.

“**Registration Expenses**” shall mean the out-of-pocket expenses of a Registration, including, without limitation, the following:

(A) all registration and filing fees (including fees with respect to filings required to be made with the Financial Industry Regulatory Authority, Inc.) and any securities exchange on which the Common Stock is then listed;

(B) fees and expenses of compliance with securities or blue sky laws (including reasonable fees and disbursements of counsel for the Underwriters in connection with blue sky qualifications of Registrable Securities);

(C) printing, messenger, telephone and delivery expenses;

(D) reasonable fees and disbursements of counsel for the Company;

(E) reasonable fees and disbursements of all independent registered public accountants of the Company incurred specifically in connection with such Registration; and

(F) reasonable fees and expenses of one (1) legal counsel (for all Demanding Holders and Requesting Holders) selected by the majority-in-interest of the Demanding Holders initiating an Underwritten Shelf Takedown.

“**Registration Statement**” shall mean any registration statement that covers the Registrable Securities pursuant to the provisions of this Agreement, including the Prospectus included in such registration statement, amendments (including post-effective amendments) and supplements to such registration statement, and all exhibits to and all material incorporated by reference in such registration statement.

“**Requesting Holder**” shall have the meaning given in [Section 2.1.4](#).

“**Rule 144**” shall mean Rule 144 promulgated under the Securities Act (or any successor rule then in effect).

“**Securities Act**” shall mean the Securities Act of 1933, as amended from time to time.

“**Shelf Registration**” shall mean a registration of securities pursuant to a registration statement filed with the Commission in accordance with and pursuant to Rule 415 promulgated under the Securities Act (or any successor rule then in effect).

“**Shelf Takedown**” shall mean an Underwritten Shelf Takedown or any proposed transfer or sale using a Registration Statement, including a Piggyback Registration.

“**Sponsor**” shall have the meaning given in the Recitals hereto.

“*Sponsor Private Placement Warrants*” shall have the meaning given in the Recitals hereto.

“*Subscription Agreement*” shall have the meaning given in the Preamble.

“*Subsequent Shelf Registration*” shall have the meaning given in [Section 2.1.2](#).

“*Third-Party Investor Stockholders*” shall have the meaning given in the Preamble.

“*Transaction Agreement*” shall have the meaning given in the Recitals hereto.

“*Transaction Shares*” shall have the meaning given in the Recitals hereto.

“*Transactions*” shall have the meaning given in the Recitals hereto.

“*Transfer*” shall mean the (a) sale of, offer to sell, contract or agreement to sell, hypothecate, pledge, grant of any option to purchase or otherwise dispose of or agreement to dispose of, directly or indirectly, or establishment or increase of a put equivalent position or liquidation with respect to or decrease of a call equivalent position within the meaning of Section 16 of the Exchange Act with respect to, any security, (b) entry into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any security, whether any such transaction is to be settled by delivery of such securities, in cash or otherwise, or (c) public announcement of any intention to effect any transaction specified in clause (a) or (b).

“*Transferee Investors*” shall have the meaning given in the Preamble.

“*Underwriter*” shall mean a securities dealer who purchases any Registrable Securities as principal in an Underwritten Offering and not as part of such dealer’s market-making activities.

“*Underwritten Registration*” or “*Underwritten Offering*” shall mean a Registration in which securities of the Company are sold to an Underwriter in a firm commitment underwriting for distribution to the public.

“*Underwritten Shelf Takedown*” shall have the meaning given in [Section 2.1.3](#).

“*Warrant Shares*” shall mean shares of Common Stock issued or issuable upon the exercise or conversion of the Private Placement Warrants.

“*Withdrawal Notice*” shall have the meaning given in the [Section 2.1.5](#).

ARTICLE II
REGISTRATIONS

2.1 Shelf Registration.

2.1.1 **Filing.** The Company shall file, as soon as practicable, but in any event within sixty (60) days after the Closing Date (the “**Filing Deadline**”), a Registration Statement for a Shelf Registration on Form S-1 (the “**Form S-1 Shelf**”) or, if the Company is eligible to use a Form S-3 Shelf, a Registration Statement for a Shelf Registration on Form S-3 (the “**Form S-3 Shelf**”), in each case, covering the resale of all the Registrable Securities (determined as of two business days prior to such filing) on a delayed or continuous basis. The Company shall use commercially reasonable efforts to cause such Shelf Registration to be declared effective as soon as possible after filing, but in no event later than the earlier of (i) sixty (60) days following the Filing Deadline and (ii) three (3) business days after the Commission notifies the Company that it will not review such Shelf Registration, if applicable (the “**Effectiveness Deadline**”); provided, that, if such Shelf Registration filed pursuant to this **Section 2.1.1** is reviewed by, and the Company receives comments from, the Commission with respect to such Shelf Registration, the Effectiveness Deadline shall be extended to ninety (90) days following the Filing Deadline. Such Shelf Registration shall provide for the resale of the Registrable Securities included therein pursuant to any method or combination of methods legally available to, and requested by, any Holder named therein (and the FF Beneficial Investor if the FF Investor submits such request). The Company shall maintain a Shelf Registration in accordance with the terms hereof, and shall prepare and file with the Commission such amendments, including post-effective amendments, and supplements as may be necessary to keep a Shelf Registration continuously effective, available for use and in compliance with the provisions of the Securities Act until such time as there are no longer any Registrable Securities. In the event the Company files a Form S-1 Shelf, the Company shall use its commercially reasonable efforts to convert the Form S-1 Shelf (and any Subsequent Shelf Registration) to a Form S-3 Shelf as soon as practicable after the Company is eligible to use Form S-3.

2.1.2 **Subsequent Shelf Registration.** If any Shelf Registration ceases to be effective under the Securities Act for any reason at any time while Registrable Securities are still outstanding, the Company shall, subject to **Section 3.4**, use its commercially reasonable efforts to promptly cause such Shelf Registration to again become effective under the Securities Act (including obtaining the prompt withdrawal of any order suspending the effectiveness of such Shelf Registration), and shall use its commercially reasonable efforts to promptly amend such Shelf Registration in a manner reasonably expected to result in the withdrawal of any order suspending the effectiveness of such Shelf Registration or file an additional registration statement as a Shelf Registration (a “**Subsequent Shelf Registration**”) registering the resale of all Registrable Securities (determined as of two business days prior to such filing), and pursuant to any method or combination of methods legally available to, and requested by, any Holder named therein. If a Subsequent Shelf Registration is filed, the Company shall use its commercially reasonable efforts to (i) cause such Subsequent Shelf Registration to become effective under the Securities Act as promptly as is reasonably practicable after the filing thereof (it being agreed that the Subsequent Shelf Registration shall be an automatic shelf registration statement (as defined in Rule 405 promulgated under the Securities Act) if the Company is a well-known seasoned issuer (as defined in Rule 405 promulgated under the Securities Act) at the most recent applicable eligibility determination date) and (ii) keep such Subsequent Shelf Registration continuously effective, available for use and in compliance with the provisions of the Securities Act until such time as there are no longer any Registrable Securities. Any such Subsequent Shelf Registration shall be on Form S-3 to the extent that the Company is eligible to use such form. Otherwise, such Subsequent Shelf Registration shall be on another appropriate form.

2.1.3 **Requests for Underwritten Shelf Takedowns.** At any time and from time to time when an effective Shelf Registration is on file with the Commission, and subject to the expiration of the Applicable Lock-Up Period, one or more of the Holders (such Holder or Holders being in such case, “**Demanding Holders**”) may request to sell all or any portion of its Registrable Securities in an Underwritten Offering that is registered pursuant to the Shelf Registration (each, an “**Underwritten Shelf Takedown**”); *provided, however*, that the Company shall only be obligated to effect an Underwritten Shelf Takedown if such offering shall include Registrable Securities proposed to be sold by the Demanding Holders with a total offering price reasonably expected to exceed, in the aggregate, \$50,000,000 (the “**Minimum Takedown Threshold**”). All requests for Underwritten Shelf Takedowns shall be made by giving written notice to the Company, which shall specify the approximate number of Registrable Securities proposed to be sold by the Demanding Holders in the Underwritten Shelf Takedown. Subject to **Section 2.4.4**, the Company shall have the right to select the Underwriters for such offering (which shall consist of one or more reputable nationally recognized investment banks), subject to the initial Demanding Holders’ prior approval (which shall not be unreasonably withheld, conditioned or delayed). The Holders may demand not more than two (2) Underwritten Shelf Takedowns in any twelve (12) month period.

2.1.4 Reduction of Underwritten Offering. If the managing Underwriter or Underwriters in an Underwritten Shelf Takedown, in good faith, advises the Company, the Demanding Holders and the Holders requesting piggy back rights pursuant to this Agreement with respect to such Underwritten Shelf Takedown (the “**Requesting Holders**”) (if any) that the dollar amount or number of Registrable Securities that the Demanding Holders and the Requesting Holders (if any) desire to sell, taken together with all other shares of Common Stock or other equity securities that the Company desires to sell and all other shares of Common Stock or other equity securities, if any, that have been requested to be sold in such Underwritten Offering pursuant to separate written contractual piggy-back registration rights held by any other stockholders, exceeds the maximum dollar amount or maximum number of equity securities that can be sold in the Underwritten Offering without adversely affecting the proposed offering price, the timing, the distribution method, or the probability of success of such offering (such maximum dollar amount or maximum number of such securities, as applicable, the “**Maximum Number of Securities**”), then the Company shall include in such Underwritten Offering, before including any shares of Common Stock or other equity securities proposed to be sold by Company or by other holders of Common Stock or other equity securities, the Registrable Securities of the Demanding Holders and the Requesting Holders (if any) (pro rata based on the respective number of Registrable Securities that each Demanding Holder and Requesting Holder (if any) has requested be included in such Underwritten Shelf Takedown and the aggregate number of Registrable Securities that the Demanding Holders and Requesting Holders have requested be included in such Underwritten Shelf Takedown) that can be sold without exceeding the Maximum Number of Securities.

2.1.5 Withdrawal. Prior to the filing of the applicable “red herring” prospectus or prospectus supplement used for marketing such Underwritten Shelf Takedown, a majority-in-interest of the Demanding Holders initiating an Underwritten Shelf Takedown shall have the right to withdraw from such Underwritten Shelf Takedown for any or no reason whatsoever upon written notification (a “**Withdrawal Notice**”) to the Company and the Underwriter or Underwriters (if any) of their intention to withdraw from such Shelf Takedown; *provided* that the other Initial Investors or the other NextNav Investors may elect to have the Company continue an Underwritten Shelf Takedown if the Minimum Takedown Threshold would still be satisfied by the Registrable Securities proposed to be sold in the Underwritten Shelf Takedown by the other Initial Investors or the other NextNav Investors, as applicable. If withdrawn, a demand for an Underwritten Shelf Takedown shall constitute a demand for an Underwritten Shelf Takedown for purposes of Section 2.1.3, unless the Demanding Holders reimburse the Company for all Registration Expenses with respect to such Underwritten Shelf Takedown. Following the receipt of any Withdrawal Notice, the Company shall promptly forward such Withdrawal Notice to any other Holders that had elected to participate in such Shelf Takedown.

2.2 Piggyback Registration

2.2.1 Piggyback Rights. Subject to Section 2.4.3, if the Company or any Holder proposes to conduct a registered offering of, or if the Company proposes to file a Registration Statement under the Securities Act with respect to the Registration of, equity securities, or securities or other obligations exercisable or exchangeable for, or convertible into equity securities, for its own account or for the account of stockholders of the Company (or by the Company and by the stockholders of the Company including, without limitation, an Underwritten Shelf Takedown pursuant to Section 2.1.3 hereof), other than a Registration Statement (or any registered offering with respect thereto) (i) filed in connection with any employee stock option or other benefit plan, (ii) pursuant to a Registration Statement on Form S-4 (or similar form that relates to a transaction subject to Rule 145 under the Securities Act or any successor rule thereto), (iii) for an offering of debt that is convertible into equity securities of the Company or (iv) for a dividend reinvestment plan, then the Company shall give written notice of such proposed offering to all of the Holders of Registrable Securities and the FF Beneficial Investor as soon as practicable but not less than ten (10) days before the anticipated filing date of such Registration Statement or, in the case of an Underwritten Offering pursuant to a Shelf Registration, the applicable “red herring” prospectus or prospectus supplement used for marketing such offering, which notice shall (A) describe the amount and type of securities to be included in such offering, the intended method(s) of distribution, and the name of the proposed managing Underwriter or Underwriters, if any, in such offering, and (B) offer to all of the Holders of Registrable Securities the opportunity to include in such registered offering such number of Registrable Securities as such Holders may request in writing within five (5) days after receipt of such written notice (such registered offering, a “**Piggyback Registration**”). Subject to Section 2.2.2, the Company shall, in good faith, cause such Registrable Securities to be included in such Piggyback Registration and, if applicable, shall use its commercially reasonable efforts to cause the managing Underwriter or Underwriters of such Piggyback Registration to permit the Registrable Securities requested by the Holders pursuant to this Section 2.2.1 to be included therein on the same terms and conditions as any similar securities of the Company included in such registered offering and to permit the sale or other disposition of such Registrable Securities in accordance with the intended method(s) of distribution thereof. The inclusion of any Holder’s Registrable Securities in a Piggyback Registration shall be subject to such Holder agreement to enter into an underwriting agreement in customary form with the Underwriter(s) selected for such Underwritten Offering. Notwithstanding anything to the contrary in the foregoing, neither the FF Investor nor the FF Beneficial Investor shall be required to execute any agreement, instrument or other document pursuant to this Section 2.2 unless such agreement, instrument or other document contains a limitation of liability provision in the form of Section 6.10.

2.2.2 Reduction of Piggyback Registration. If the managing Underwriter or Underwriters in an Underwritten Offering that is to be a Piggyback Registration, in good faith, advises the Company and the Holders of Registrable Securities (and the FF Beneficial Investor) participating in the Piggyback Registration that the dollar amount or number of shares of Common Stock or other equity securities that the Company desires to sell, taken together with (i) the shares of Common Stock or other equity securities, if any, as to which Registration or a registered offering has been demanded pursuant to separate written contractual arrangements with persons or entities other than the Holders of Registrable Securities hereunder, (ii) the Registrable Securities as to which registration has been requested pursuant to Section 2.2 hereof, and (iii) the shares of Common Stock or other equity securities, if any, as to which Registration or a registered offering has been requested pursuant to separate written contractual piggy-back registration rights of other stockholders of the Company, exceeds the Maximum Number of Securities, then:

(a) If the Registration or registered offering is undertaken for the Company's account, the Company shall include in any such Registration or registered offering: (A) first, the shares of Common Stock or other equity securities that the Company desires to sell, which can be sold without exceeding the Maximum Number of Securities; (B) second, to the extent that the Maximum Number of Securities has not been reached under the foregoing clause (A), the Registrable Securities of Holders exercising their rights to register their Registrable Securities pursuant to Section 2.2.1, pro rata, based on the respective number of Registrable Securities that each Holder has requested be included in such Underwritten Offering and the aggregate number of Registrable Securities that the Holders have requested to be included in such Underwritten Offering, which can be sold without exceeding the Maximum Number of Securities; and (C) third, to the extent that the Maximum Number of Securities has not been reached under the foregoing clauses (A) and (B), the shares of Common Stock or other equity securities, if any, as to which Registration or a registered offering has been requested pursuant to written contractual piggy-back registration rights of other stockholders of the Company, which can be sold without exceeding the Maximum Number of Securities;

(b) If the Registration or registered offering is pursuant to a request by persons or entities other than the Holders of Registrable Securities, then the Company shall include in any such Registration or registered offering (A) first, the shares of Common Stock or other equity securities, if any, of such requesting persons or entities, other than the Holders of Registrable Securities, which can be sold without exceeding the Maximum Number of Securities; (B) second, to the extent that the Maximum Number of Securities has not been reached under the foregoing clause (A), the Registrable Securities of Holders exercising their rights to register their Registrable Securities pursuant to Section 2.2.1, pro rata, based on the respective number of Registrable Securities that each Holder has requested be included in such Underwritten Offering and the aggregate number of Registrable Securities that the Holders have requested to be included in such Underwritten Offering, which can be sold without exceeding the Maximum Number of Securities; (C) third, to the extent that the Maximum Number of Securities has not been reached under the foregoing clauses (A) and (B), the shares of Common Stock or other equity securities that the Company desires to sell, which can be sold without exceeding the Maximum Number of Securities; and (D) fourth, to the extent that the Maximum Number of Securities has not been reached under the foregoing clauses (A), (B) and (C), the shares of Common Stock or other equity securities for the account of other persons or entities that the Company is obligated to register pursuant to separate written contractual arrangements with such persons or entities, which can be sold without exceeding the Maximum Number of Securities; and

(c) If the Registration or registered offering is pursuant to a request by Holder(s) of Registrable Securities pursuant to Section 2.1 hereof, then the Company shall include in any such Registration or registered offering securities pursuant to Section 2.1.5.

2.2.3 Piggyback Registration Withdrawal. Any Holder of Registrable Securities (other than a Demanding Holder, whose right to withdrawal from an Underwritten Shelf Takedown, and related obligations, shall be governed by Section 2.1.5) shall have the right to withdraw from a Piggyback Registration for any or no reason whatsoever upon written notification to the Company and the Underwriter or Underwriters (if any) of his, her or its intention to withdraw from such Piggyback Registration prior to the effectiveness of the Registration Statement filed with the Commission with respect to such Piggyback Registration or, in the case of a Piggyback Registration pursuant to a Shelf Registration, the filing of the applicable "red herring" prospectus or prospectus supplement with respect to such Piggyback Registration used for marketing such transaction. The Company (whether on its own good faith determination or as the result of a request for withdrawal by persons pursuant to separate written contractual obligations) may withdraw a Registration Statement filed with the Commission in connection with a Piggyback Registration (which, in no circumstance, shall include the Shelf Registration) at any time prior to the effectiveness of such Registration Statement. Notwithstanding anything to the contrary in this Agreement (other than Section 2.1.5), the Company shall be responsible for the Registration Expenses incurred in connection with the Piggyback Registration prior to its withdrawal under this Section 2.2.3.

2.2.4 Unlimited Piggyback Registration Rights. For purposes of clarity, subject to Section 2.1.5, any Piggyback Registration effected pursuant to Section 2.2 hereof shall not be counted as a demand for an Underwritten Shelf Takedown under Section 2.1.4 hereof.

2.3 Market Stand-off. In connection with any Underwritten Offering of equity securities of the Company (other than a Block Trade), each Holder of Registrable Securities agrees that it shall not Transfer any shares of Common Stock or other equity securities of the Company (other than those included in such offering pursuant to this Agreement), without the prior written consent of the Company, during the sixty (60)-day period (or such shorter time agreed to by the managing Underwriter(s)) beginning on the date of pricing of such offering, except in the event the Underwriters managing the offering otherwise agree by written consent. Each Holder of Registrable Securities agrees to execute a customary lock-up agreement in favor of the Underwriters to such effect (in each case on substantially the same terms and conditions as all such Holders). For the sake of clarity, no Holder shall be obligated under the provisions of this Section 2.3 to the extent such Holder no longer owns Registrable Securities.

2.4 Block Trades.

2.4.1 Notwithstanding the foregoing, at any time and from time to time when an effective Shelf Registration is on file with the Commission, if a Demanding Holder wishes to engage in an underwritten registered offering not involving a “roadshow,” an offer commonly known as a “block trade” (a “**Block Trade**”), with a total offering price reasonably expected to exceed, in the aggregate, either (x) \$50 million or (y) all remaining Registrable Securities held by the Demanding Holder, then notwithstanding the time periods provided for in Section 2.1.3, such Demanding Holder only need to notify the Company of the Block Trade at least five (5) business days prior to the day such offering is to commence and the Company shall as expeditiously as possible use its commercially reasonable efforts to facilitate such Block Trade; *provided* that the Demanding Holders representing a majority of the Registrable Securities wishing to engage in the Block Trade shall use commercially reasonable efforts to work with the Company and any Underwriters prior to making such request in order to facilitate preparation of the registration statement, prospectus and other offering documentation related to the Block Trade.

2.4.2 Prior to the filing of the applicable “red herring” prospectus or prospectus supplement used in connection with a Block Trade, a majority-in-interest of the Demanding Holders initiating such Block Trade shall have the right to submit a Withdrawal Notice to the Company and the Underwriter or Underwriters (if any) of their intention to withdraw from such Block Trade. Notwithstanding anything to the contrary in this Agreement, the Company shall be responsible for the Registration Expenses incurred in connection with a block trade prior to its withdrawal under this Section 2.4.2.

2.4.3 Notwithstanding anything to the contrary in this Agreement, Section 2.2 hereof shall not apply to a Block Trade initiated by a Demanding Holder pursuant to this Agreement.

2.4.4 The Demanding Holder in a Block Trade shall have the right to select the Underwriters for such Block Trade (which shall consist of one or more reputable nationally recognized investment banks).

2.5 Original Registration Agreement. The Initial Investors acknowledge and agree that this Agreement shall supersede the Original Registration Agreement, which shall be of no further force or effect.

**ARTICLE III
COMPANY PROCEDURES**

3.1 General Procedures. If the Company is required to effect the Registration of Registrable Securities, the Company shall use its commercially reasonable efforts to effect such Registration to permit the sale of such Registrable Securities in accordance with the intended plan of distribution thereof, and pursuant thereto the Company shall, as expeditiously as possible:

3.1.1 prepare and file with the Commission as soon as practicable a Registration Statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such Registration Statement to become effective and remain effective until all Registrable Securities covered by such Registration Statement have been sold;

3.1.2 prepare and file with the Commission such amendments and post-effective amendments to the Registration Statement, and such supplements to the Prospectus, as may be requested by any Holder or any Underwriter of Registrable Securities or as may be required by the rules, regulations or instructions applicable to the registration form used by the Company or by the Securities Act or rules and regulations thereunder to keep the Registration Statement effective until all Registrable Securities covered by such Registration Statement are sold in accordance with the intended plan of distribution set forth in such Registration Statement or supplement to the Prospectus;

3.1.3 prior to filing a Registration Statement or Prospectus, or any amendment or supplement thereto, furnish without charge to the Underwriters, if any, and each Holder of Registrable Securities included in such Registration, the FF Beneficial Investor (provided that the FF Investor remains a Holder holding such Registrable Securities) and each such Holder's legal counsel, copies of such Registration Statement as proposed to be filed, each amendment and supplement to such Registration Statement (in each case including all exhibits thereto and documents incorporated by reference therein), the Prospectus included in such Registration Statement (including each preliminary Prospectus), and such other documents as the Underwriters and each Holder of Registrable Securities included in such Registration or the FF Beneficial Investor or the legal counsel for any such Holders may request in order to facilitate the disposition of the Registrable Securities owned by such Holders;

3.1.4 prior to any public offering of Registrable Securities, use its commercially reasonable efforts to (i) register or qualify the Registrable Securities covered by the Registration Statement under such securities or "blue sky" laws of such jurisdictions in the United States as any Holder of Registrable Securities included in such Registration Statement (in light of their intended plan of distribution) may request and (ii) take such action necessary to cause such Registrable Securities covered by the Registration Statement to be registered with or approved by such other governmental authorities as may be necessary by virtue of the business and operations of the Company and do any and all other acts and things that may be necessary or advisable to enable the Holders of Registrable Securities included in such Registration Statement to consummate the disposition of such Registrable Securities in such jurisdictions; *provided, however*, that the Company shall not be required to qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify or take any action to which it would be subject to general service of process or taxation in any such jurisdiction where it is not then otherwise so subject;

3.1.5 cause all such Registrable Securities to be listed on each securities exchange or automated quotation system on which similar securities issued by the Company are then listed;

3.1.6 provide a transfer agent or warrant agent, as applicable, and registrar for all such Registrable Securities no later than the effective date of such Registration Statement;

3.1.7 advise each seller of such Registrable Securities, promptly after it shall receive notice or obtain knowledge thereof, of the issuance of any stop order by the Commission suspending the effectiveness of such Registration Statement or the initiation or threatening of any proceeding for such purpose and promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such stop order should be issued;

3.1.8 at least five (5) days prior to the filing of any Registration Statement or Prospectus or any amendment or supplement to such Registration Statement or Prospectus or any document that is to be incorporated by reference into such Registration Statement or Prospectus, furnish a copy thereof to each seller of such Registrable Securities and its counsel, including, without limitation, providing copies promptly upon receipt of any comment letters received with respect to any such Registration Statement or Prospectus;

3.1.9 notify the Holders and the FF Beneficial Investor at any time when a Prospectus relating to such Registration Statement is required to be delivered under the Securities Act, of the happening of any event as a result of which the Prospectus included in such Registration Statement, as then in effect, includes a Misstatement, and then to correct such Misstatement as set forth in [Section 3.4](#) hereof;

3.1.10 permit a representative of the Holders and the FF Beneficial Investor, the Underwriters, if any, and any attorney or accountant retained by such Holders, the FF Beneficial Investor or Underwriter to participate, at each such person's own expense, in the preparation of the Registration Statement, and cause the Company's officers, directors and employees to supply all information reasonably requested by any such representative, Underwriter, attorney or accountant in connection with the Registration; *provided, however*, that such representatives or Underwriters agree to confidentiality arrangements reasonably satisfactory to the Company, prior to the release or disclosure of any such information;

3.1.11 obtain a "cold comfort" letter from the Company's independent registered public accountants in the event of an Underwritten Registration which the participating Holders and the FF Beneficial Investor may rely on, in customary form and covering such matters of the type customarily covered by "cold comfort" letters as the managing Underwriter may reasonably request, and reasonably satisfactory to a majority-in-interest of the participating Holders;

3.1.12 on the date the Registrable Securities are delivered for sale pursuant to such Registration, obtain an opinion, dated such date, of counsel representing the Company for the purposes of such Registration, addressed to the Holders and the FF Beneficial Investor, the placement agent or sales agent, if any, and the Underwriters, if any, covering such legal matters with respect to the Registration in respect of which such opinion is being given as the Holders, the FF Beneficial Investor, placement agent, sales agent, or Underwriter may reasonably request and as are customarily included in such opinions and negative assurance letters, and reasonably satisfactory to a majority in interest of the participating Holders;

3.1.13 in the event of any Underwritten Offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing Underwriter of such offering;

3.1.14 make available to its security holders, as soon as reasonably practicable, an earnings statement covering the period of at least twelve (12) months beginning with the first day of the Company's first full calendar quarter after the effective date of the Registration Statement which satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder (or any successor rule promulgated thereafter by the Commission);

3.1.15 with respect to an Underwritten Offering pursuant to [Section 2.1.4](#), use its commercially reasonable efforts to make available senior executives of the Company to participate in customary "road show" presentations that may be reasonably requested by the Underwriter in such Underwritten Offering; and

3.1.16 otherwise, in good faith, cooperate reasonably with, and take such customary actions as may reasonably be requested by the Holders or the FF Beneficial Investor, in connection with such Registration.

Notwithstanding the foregoing, the Company shall not be required to provide any documents or information to an Underwriter if such Underwriter has not then been named with respect to the applicable Underwritten Offering.

3.2 **Registration Expenses.** The Registration Expenses of all Registrations shall be borne by the Company. It is acknowledged by the Holders that the Holders shall bear all incremental selling expenses relating to the sale of Registrable Securities, such as Underwriters' commissions and discounts, brokerage fees, Underwriter marketing costs and, other than as set forth in the definition of "Registration Expenses," all reasonable fees and expenses of any legal counsel representing the Holders.

3.3 Requirements for Participation in Underwritten Offerings. Notwithstanding anything in this Agreement to the contrary, if any Holder does not provide the Company with its requested Holder Information, the Company may exclude such Holder's Registrable Securities from the applicable Registration Statement or Prospectus if the Company determines, based on the advice of counsel, that such information is necessary to effect the registration and such Holder continues thereafter to withhold such information. No person may participate in any Underwritten Offering for equity securities of the Company pursuant to a Registration initiated by the Company hereunder unless such person (i) agrees to sell such person's securities on the basis provided in any underwriting arrangements approved by the Company and (ii) completes and executes all customary questionnaires, powers of attorney, indemnities, lock-up agreements, underwriting agreements and other customary documents as may be reasonably required under the terms of such underwriting arrangements. The exclusion of a Holder's Registrable Securities as a result of this Section 3.3 shall not affect the registration of the other Registrable Securities to be included in such Registration.

3.4 Suspension of Sales; Adverse Disclosure.

3.4.1 Upon receipt of written notice from the Company that a Registration Statement or Prospectus contains a Misstatement, each of the Holders shall forthwith discontinue disposition of Registrable Securities until it has received copies of a supplemented or amended Prospectus correcting the Misstatement (it being understood that the Company hereby covenants to prepare and file such supplement or amendment as soon as practicable after the time of such notice), or until it is advised in writing by the Company that the use of the Prospectus may be resumed.

3.4.2 Subject to Section 3.4.4, if the filing, initial effectiveness or continued use of a Registration Statement in respect of any Registration at any time would (a) require the Company to make an Adverse Disclosure, (b) require the inclusion in such Registration Statement of financial statements that are unavailable to the Company for reasons beyond the Company's control, or (c) in the good faith judgment of the majority of the Board, be detrimental to the Company and the majority of the Board concludes as a result that it is advisable to defer such filing, initial effectiveness or continued use at such time, the Company may, upon giving prompt written notice of such action to the Holders and the FF Beneficial Investor, delay the filing or initial effectiveness of, or suspend use of, such Registration Statement for the shortest period of time determined in good faith by the Company to be necessary for such purpose. In the event the Company exercises its rights under this Section 3.4.2, the Holders agree to suspend, immediately upon their receipt of the notice referred to above, their use of the Prospectus relating to any Registration in connection with any sale or offer to sell Registrable Securities.

3.4.3 Subject to Section 3.4.4, (a) during the period starting with the date sixty (60) days prior to the Company's good faith estimate of the date of the filing of, and ending on a date one hundred and twenty (120) days after the effective date of, a Company-initiated Registration and provided that the Company continues to actively employ, in good faith, all commercially reasonable efforts to maintain the effectiveness of the applicable Registration Statement, or (b) if, pursuant to Section 2.1.4, Holders (or the FF Beneficial Investor) have requested an Underwritten Shelf Takedown and the Company and Holders are unable to obtain the commitment of underwriters to firmly underwrite such offering, the Company may, upon giving prompt written notice of such action to the Holders (or the FF Beneficial Investor, if applicable), delay any other registered offering pursuant to Sections 2.1.4 or 2.4.

3.4.4 The right to delay or suspend any filing, initial effectiveness or continued use of a Registration Statement pursuant to Section 3.4.2 or a registered offering pursuant to Section 3.4.3 shall be exercised by the Company, in the aggregate, not more than three (3) times in any twelve-month period, and any such delay or suspension shall last for no more than sixty (60) days.

3.4.5 The Company shall as promptly as commercially practicable notify the Holders and the FF Beneficial Investor of the expiration of any period during which it exercised its rights under this Section 3.4.

3.5 Reporting Obligations. As long as any Holder shall own Registrable Securities (or in the case of the FF Investor, as long as it is the holder of Registrable Securities), the Company, at all times while it shall be a reporting company under the Exchange Act, covenants to file timely (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to Sections 13(a) or 15(d) of the Exchange Act and to promptly furnish the Holders and the FF Beneficial Investor with true and complete copies of all such filings. The Company further covenants that it shall take such further action as any Holder may reasonably request, all to the extent required from time to time to enable such Holder to sell shares of the Common Stock held by such Holder without registration under the Securities Act within the limitation of the exemptions provided by Rule 144 (or any successor rule promulgated thereafter by the Commission), including providing any legal opinions. Upon the request of any Holder, the Company shall deliver to such Holder (and to the FF Beneficial Investor in the case that the FF Investor has made such request) a written certification of a duly authorized officer as to whether it has complied with such requirements.

**ARTICLE IV
INDEMNIFICATION AND CONTRIBUTION**

4.1 Indemnification.

4.1.1 The Company agrees to indemnify, to the extent permitted by law, each Holder of Registrable Securities (which for the purposes of this Section 4.1 shall include the FF Beneficial Investor for so long as the FF Investor is a holder of Registrable Securities), its officers, members, managers, and directors (if applicable) and each person who controls such Holder (within the meaning of the Securities Act) against all losses, claims, damages, liabilities and expenses (including attorneys' fees) resulting from any untrue or alleged untrue statement of material fact contained in any Registration Statement, Prospectus or preliminary Prospectus or any amendment thereof or supplement thereto or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as the same are caused by or contained in any information furnished in writing to the Company by such Holder expressly for use therein. The Company shall indemnify the Underwriters, their officers and directors and each person who controls such Underwriters (within the meaning of the Securities Act) to the same extent as provided in the foregoing with respect to the indemnification of the Holder.

4.1.2 In connection with any Registration Statement in which a Holder of Registrable Securities is participating, such Holder shall furnish to the Company in writing such information and affidavits as the Company reasonably requests for use in connection with any such Registration Statement or Prospectus (the "**Holder Information**") and, to the extent permitted by law, shall indemnify the Company, its directors and officers and agents and each person who controls the Company (within the meaning of the Securities Act) against any losses, claims, damages, liabilities and expenses (including without limitation reasonable attorneys' fees) resulting from any untrue statement of material fact contained in the Registration Statement, Prospectus or preliminary Prospectus or any amendment thereof or supplement thereto or any omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, but only to the extent that such untrue statement or omission is contained in any information or affidavit so furnished in writing by such Holder expressly for use therein; *provided, however*, that the obligation to indemnify shall be several, not joint and several, among such Holders of Registrable Securities, and the liability of each such Holder of Registrable Securities shall be in proportion to and limited to the net proceeds received by such Holder from the sale of Registrable Securities pursuant to such Registration Statement. The Holders of Registrable Securities shall indemnify the Underwriters, their officers, directors and each person who controls such Underwriters (within the meaning of the Securities Act) to the same extent as provided in the foregoing with respect to indemnification of the Company.

4.1.3 Any person entitled to indemnification herein shall (i) give prompt written notice to the indemnifying party of any claim with respect to which it seeks indemnification (*provided* that the failure to give prompt notice shall not impair any person's right to indemnification hereunder to the extent such failure has not materially prejudiced the indemnifying party) and (ii) unless in such indemnified party's reasonable judgment a conflict of interest between such indemnified and indemnifying parties may exist with respect to such claim, permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party. If such defense is assumed, the indemnifying party shall not be subject to any liability for any settlement made by the indemnified party without its consent (but such consent shall not be unreasonably withheld). An indemnifying party who is not entitled to, or elects not to, assume the defense of a claim shall not be obligated to pay the fees and expenses of more than one counsel (plus local counsel) for all parties indemnified by such indemnifying party with respect to such claim, unless in the reasonable judgment of any indemnified party a conflict of interest may exist between such indemnified party and any other of such indemnified parties with respect to such claim. No indemnifying party shall, without the consent of the indemnified party, consent to the entry of any judgment or enter into any settlement which cannot be settled in all respects by the payment of money (and such money is so paid by the indemnifying party pursuant to the terms of such settlement) or which settlement does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect to such claim or litigation.

4.1.4 The indemnification provided for under this Agreement shall remain in full force and effect regardless of any investigation made by or on behalf of the indemnified party or any officer, director or controlling person of such indemnified party and shall survive the transfer of securities. The Company and each Holder of Registrable Securities participating in an offering also agrees to make such provisions as are reasonably requested by any indemnified party for contribution to such party in the event the Company's or such Holder's indemnification is unavailable for any reason.

4.1.5 If the indemnification provided under Section 4.1 hereof from the indemnifying party is unavailable or insufficient to hold harmless an indemnified party in respect of any losses, claims, damages, liabilities and expenses referred to herein, then the indemnifying party, in lieu of indemnifying the indemnified party, shall contribute to the amount paid or payable by the indemnified party as a result of such losses, claims, damages, liabilities and expenses in such proportion as is appropriate to reflect the relative fault of the indemnifying party and the indemnified party, as well as any other relevant equitable considerations. The relative fault of the indemnifying party and indemnified party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, was made by, or relates to information supplied by, such indemnifying party or indemnified party, and the indemnifying party's and indemnified party's relative intent, knowledge, access to information and opportunity to correct or prevent such action; *provided, however*, that the liability of any Holder under this Section 4.1.5 shall be limited to the amount of the net proceeds received by such Holder in such offering giving rise to such liability. The amount paid or payable by a party as a result of the losses or other liabilities referred to above shall be deemed to include, subject to the limitations set forth in Sections 4.1.1, 4.1.2 and 4.1.3 above, any legal or other fees, charges or expenses reasonably incurred by such party in connection with any investigation or proceeding. The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 4.1.5 were determined by pro rata allocation or by any other method of allocation, which does not take account of the equitable considerations referred to in this Section 4.1.5. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution pursuant to this Section 4.1.5 from any person who was not guilty of such fraudulent misrepresentation.

ARTICLE V
LOCK-UP

5.1 Lock-up. Subject to Section 5.2, each Holder agrees that, until the end of the Applicable Lock-Up Period (as defined below), it, he or she shall not Transfer (i) any Transaction Shares, (ii) Private Placement Warrants, or Warrant Shares. The “*Applicable Lock-Up Period*” shall mean:

(a) With respect to the Transaction Shares held by any of the Initial Investors, one year after the Closing Date; *provided, however*, that such Applicable Lock-Up Period shall terminate earlier if, for at least 20 trading days within any 30-trading day period commencing at least 150 days after the Closing Date, the last sale price of the Common Stock equals or exceeds \$12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like);

(b) With respect to the Transaction Shares held by any of the NextNav Investors, 180 days after the Closing Date; *provided, however*, that such Applicable Lock-Up Period shall terminate earlier with respect to 50% of the Transactions Shares held by each of the NextNav Investors if, for at least 20 trading days within any 30-trading day period commencing at least 60 days after the Closing Date, the last sale price of the Common Stock equals or exceeds \$12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like); and

(c) With respect to the Private Placement Warrants and Warrant Shares, 30 days after the Closing Date.

5.2 Permitted Transfers. Notwithstanding the provisions set forth in Section 5.1, any Holder or its Permitted Transferees may Transfer the Transaction Shares, Private Placement Warrants or Warrant Shares during the Applicable Lock-Up Period: (a) to (i) the Company’s officers or directors, (ii) any affiliates or family members of the Company’s officers or directors, (iii) any direct or indirect partners, members or equity holders of the Sponsor or any related investment funds or vehicles controlled or managed by such persons or their respective affiliates, or (iv) any direct or indirect partners, members or equity holders of any NextNav Investor, any affiliates of any NextNav Investor or any related investment funds or vehicles controlled or managed by such persons or their respective affiliates; (b) in the case of an individual, by gift to a member of the individual’s immediate family or to a trust, the beneficiary of which is a member of the individual’s immediate family or an affiliate of such person, or to a charitable organization; (c) in the case of an individual, by virtue of laws of descent and distribution upon death of the individual; (d) in the case of an individual, pursuant to a qualified domestic relations order; (e) by virtue of the laws of the State of Delaware or the Sponsor’s limited liability company agreement upon dissolution of the Sponsor; (f) in connection with any bona fide mortgage, encumbrance or pledge to a financial institution in connection with any bona fide loan or debt transaction or enforcement thereunder; (g) to the Company; (h) in connection with a liquidation, merger, stock exchange, reorganization, tender offer approved by the Board or a duly authorized committee thereof or other similar transaction which results in all of the Company’s stockholders having the right to exchange their shares Common Stock for cash, securities or other property subsequent to the Closing Date; or (i) in the case of the FF Investor and the FF Beneficial Investor, to any FF Permitted Transferee; *provided, however*, that in the case of clauses (a) through (e) these permitted transferees must enter into a written agreement with the Company agreeing to be bound by the transfer restrictions in this ARTICLE V.

5.3 Non-Transaction Shares. For the avoidance of doubt, with respect to the Sponsor, only Common Stock issued in exchange for the Founder Shares shall be considered Transaction Shares, and any other Common Stock held by the Sponsor or any of its affiliates shall not be considered Transaction Shares or be subject to this ARTICLE V (other than the Warrant Shares).

**ARTICLE VI
MISCELLANEOUS**

6.1 Notices. Any notice or communication under this Agreement must be in writing and given by (i) deposit in the United States mail, addressed to the party to be notified, postage prepaid and registered or certified with return receipt requested, (ii) delivery in person or by courier service providing evidence of delivery, or (iii) transmission by hand delivery, or facsimile. Each notice or communication that is mailed, delivered, or transmitted in the manner described above shall be deemed sufficiently given, served, sent, and received, in the case of mailed notices, on the third business day following the date on which it is mailed and, in the case of notices delivered by courier service, hand delivery, or facsimile, at such time as it is delivered to the addressee (with the delivery receipt or the affidavit of messenger) or at such time as delivery is refused by the addressee upon presentation. Any notice or communication under this Agreement must be addressed, if to the Company, to: 1775 Tysons Blvd., 5th Floor, McLean, VA 22102, Attention: Chief Financial Officer, and, if to any Holder, at such Holder's address or contact information as set forth in the Company's books and records. Any party may change its address for notice at any time and from time to time by written notice to the other parties hereto, and such change of address shall become effective thirty (30) days after delivery of such notice as provided in this Section 6.1.

6.2 Assignment; No Third Party Beneficiaries.

6.2.1 This Agreement and the rights, duties and obligations of the Company hereunder may not be assigned or delegated by the Company in whole or in part.

6.2.2 Prior to the expiration of the Applicable Lock-Up Period, as the case may be, no Holder may assign or delegate such Holder's rights, duties or obligations under this Agreement, in whole or in part, except in connection with a transfer of Registrable Securities by such Holder to a Permitted Transferee but only if such Permitted Transferee agrees to become bound by the transfer restrictions set forth in this Agreement.

6.2.3 This Agreement and the provisions hereof shall be binding upon and shall inure to the benefit of each of the parties and its successors and the permitted assigns of the Holders, which shall include Permitted Transferees. (and in the case of the FF Investor and the FF Beneficial Investor, shall also include any FF Permitted Transferee).

6.2.4 This Agreement shall not confer any rights or benefits on any persons that are not parties hereto, other than as expressly set forth in this Agreement and Section 6.2 hereof.

6.2.5 No assignment by any party hereto of such party's rights, duties and obligations hereunder shall be binding upon or obligate the Company unless and until the Company shall have received (i) written notice of such assignment as provided in Section 6.1 hereof and (ii) the written agreement of the assignee, in a form attached hereto as Exhibit A, to be bound by the terms and provisions of this Agreement. Any transfer or assignment made other than as provided in this Section 6.2 shall be null and void. Notwithstanding the foregoing, the FF Investor and the FF Beneficial Investor may transfer or assign any of their respective rights or obligations under this Agreement, without prior written consent, to any FF Permitted Transferee, or otherwise with the consent of the Company. Following such transfer or assignment to a FF Permitted Transferee, the FF Permitted Transferee shall be entitled to receive the benefit of the terms of this Agreement, as if such FF Permitted Transferee had executed this Agreement.

6.3 Counterparts. This Agreement may be executed in multiple counterparts and delivered electronically (including facsimile or PDF counterparts), each of which shall be deemed an original, and all of which together shall constitute the same instrument, but only one of which need be produced.

6.4 Governing Law; Venue. NOTWITHSTANDING THE PLACE WHERE THIS AGREEMENT MAY BE EXECUTED BY ANY OF THE PARTIES HERETO, THE PARTIES EXPRESSLY AGREE THAT (I) THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED UNDER THE LAWS OF THE STATE OF NEW YORK AS APPLIED TO AGREEMENTS AMONG NEW YORK RESIDENTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN NEW YORK, WITHOUT REGARD TO THE CONFLICT OF LAW PROVISIONS OF SUCH JURISDICTION AND (II) THE VENUE FOR ANY ACTION TAKEN WITH RESPECT TO THIS AGREEMENT SHALL BE ANY STATE OR FEDERAL COURT IN NEW YORK COUNTY IN THE STATE OF NEW YORK.

6.5 Trial By Jury. EACH PARTY HERETO ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND, THEREFORE, EACH SUCH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT SUCH PARTY MAY HAVE TO A TRIAL BY JURY IN RESPECT TO ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT.

6.6 Amendments and Modifications. Upon the written consent of the Company and the Holders of at least a majority in interest of the Registrable Securities at the time in question, compliance with any of the provisions, covenants and conditions set forth in this Agreement may be waived, or any of such provisions, covenants or conditions may be amended or modified; *provided, however*, that notwithstanding the foregoing, any amendment hereto or waiver hereof that adversely affects one Holder, solely in its capacity as a holder of the shares of capital stock of the Company, in a manner that is materially different from the other Holders (in such capacity) shall require the consent of the Holder so affected. No course of dealing between any Holder or the Company and any other party hereto or any failure or delay on the part of a Holder or the Company in exercising any rights or remedies under this Agreement shall operate as a waiver of any rights or remedies of any Holder or the Company. No single or partial exercise of any rights or remedies under this Agreement by a party shall operate as a waiver or preclude the exercise of any other rights or remedies hereunder or thereunder by such party.

6.7 Other Registration Rights. Other than (i) the Third-Party Investor Stockholders who have registration rights pursuant to their respective Subscription Agreements and (ii) as provided in the Warrant Agreement, dated as of October 15, 2020, between the SPAC and Continental Stock Transfer & Trust Company, the Company represents and warrants that no person, other than a Holder of Registrable Securities or the FF Beneficial Investor (for so long as the FF Investor is a Holder of Registrable Securities), has any right to require the Company to register any securities of the Company for sale or to include such securities of the Company in any Registration filed by the Company for the sale of securities for its own account or for the account of any other person.

6.8 Term. This Agreement shall terminate with respect to any Holder on the date that such Holder no longer holds any Registrable Securities. The provisions of Section 3.5 and ARTICLE IV shall survive any termination.

6.9 Holder Information. Each Holder agrees, if requested in writing, to represent to the Company the total number of Registrable Securities held by such Holder in order for the Company to make determinations hereunder.

6.10 The Northern Trust Company Limitation of Liability. The FF Investor enters into and is liable under (a) this Agreement, (b) any other document or agreement which the FF Investor may be required to provide under this Agreement and (c) any document or agreement executed by the Company or any other person as agent or attorney of the FF Investor under this Agreement, only in its capacity as custodian for the FF Beneficial Investor, and to the extent that it is actually indemnified by the FF Beneficial Investor. To the extent that this Section 6.10 operates to reduce the amounts for which the FF Investor would otherwise be liable to any person, the FF Beneficial Investor will pay or procure the payment of such shortfall to such person.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed as of the date first written above.

COMPANY:

NEXTRAV INC.

By: /s/ Igor Volshteyn
Name: Igor Volshteyn
Title: President

INITIAL INVESTORS:

SPARTACUS SPONSOR LLC

By: its Managing Members:

CCUR HOLDINGS, INC.

By: /s/ Igor Volshteyn
Name: Igor Volshteyn
Title: President and CEO

MILFAM CI LLC SPARTACUS

By: MILFAM CI Management LLC, its Manager

By: /s/ Neil Subin
Name: Neil Subin
Title: Sole Member

B. RILEY PRINCIPAL INVESTMENTS, LLC

By: /s/ Daniel Shribman
Name: Daniel Shribman
Title: CIO

REDS ROAD HOLDINGS LLC

By: /s/ Timothy M. Presutti
Name: Timothy M. Presutti
Title: Authorized Person

PETER D. AQUINO

/s/ Peter D. Aquino
Name: Peter D. Aquino

[SIGNATURE PAGE TO REGISTRATION RIGHTS AGREEMENT]

NEXTNAV INVESTORS:

COLUMBIA:

COLUMBIA CAPITAL EQUITY PARTNERS IV (ECI), LTD.

By: Columbia Capital Equity Partners IV (QP), L.P., its sole shareholder
By: Columbia Capital Equity Partners IV, L.P., its General Partner
By: Columbia Capital IV, LLC, its General Partner

By: /s/ Donald A. Doering
Name: Donald A. Doering
Title: Executive Vice President

COLUMBIA CAPITAL EQUITY PARTNERS IV (QPCO), L.P.

By: /s/ Donald A. Doering
Name: Donald A. Doering
Title: CFO and Secretary

COLUMBIA CAPITAL EMPLOYEE INVESTORS IV, L.P.

By: Columbia Capital IV, LLC, its General Partner

By: /s/ Donald A. Doering
Name: Donald A. Doering
Title: Executive Vice President

[SIGNATURE PAGE TO REGISTRATION RIGHTS AGREEMENT]

NEXTNAV INVESTORS:

TELCOM:

TELCOM LMS HOLDINGS LLC

By: /s/ Serge G. Martin
Name: Serge G. Martin
Title: Executive Vice President

OAK:

OAK INVESTMENT PARTNERS XIII, L.P.

By: /s/ Bandel Carano
Name: Bandel Carano
Title: Managing Partner

FORTRESS:

CF NNAV-E LLC

By: /s/ William Covino
Name: William Covino
Title: Chief Financial Officer

[SIGNATURE PAGE TO REGISTRATION RIGHTS AGREEMENT]

NEXTNAV INVESTORS:

GOLDMAN SACHS:

GLOBAL LONG SHORT PARTNERS MASTER LP

By: GS Investment Strategies, LLC, its investment manager

By: /s/ Niladri Mukhopadhyay

Name: Niladri Mukhopadhyay

Title: Authorized Signatory

GLOBAL PRIVATE OPPORTUNITIES PARTNERS HOLDINGS II CORP

By: GS Investment Strategies, LLC, its investment manager

By: /s/ Niladri Mukhopadhyay

Name: Niladri Mukhopadhyay

Title: Authorized Signatory

GLOBAL PRIVATE OPPORTUNITIES PARTNERS LP

By: GS Investment Strategies, LLC, its investment manager

By: /s/ Niladri Mukhopadhyay

Name: Niladri Mukhopadhyay

Title: Authorized Signatory

GLOBAL PRIVATE OPPORTUNITIES PARTNERS OFFSHORE HOLDINGS LP

By: GS Investment Strategies, LLC, its investment manager

By: /s/ Niladri Mukhopadhyay

Name: Niladri Mukhopadhyay

Title: Authorized Signatory

[SIGNATURE PAGE TO REGISTRATION RIGHTS AGREEMENT]

NEXTNAV INVESTORS:

FF INVESTOR:

EXECUTED on behalf of **THE NORTHERN TRUST COMPANY (ABN 62 126 279 918)**, a company incorporated in the State of Illinois in the United States of America, in its capacity as custodian for the Future Fund Investment Company No.3 Pty Ltd. (ACN 134 338 882) by

James McLaren

_____ being a person who, in accordance with the laws of that territory, is acting under the authority of the company.

/s/ James McLaren

_____ By executing this agreement the signatory warrants that the signatory is duly authorized to execute this agreement on behalf of **THE NORTHERN TRUST COMPANY**

FF BENEFICIAL INVESTOR:

EXECUTED by **Future Fund Investment Company No.3 Pty Ltd ACN 134 338 882** by its attorney under power of attorney dated 10 July 2019 (who, by signing, confirms they have received no notice of revocation of that power):

/s/ Kylie Yong

_____ (Attorney Signature)

Kylie Yong

_____ (Printed Name)

NEXTNAV INVESTORS:

By: /s/ Christian D. Gates
_____ Christian D. Gates

By: /s/ David L. Knutson
_____ David L. Knutson

By: /s/ Gary M. Parsons
_____ Gary M. Parsons

By: /s/ Ganesh Pattabiraman
_____ Ganesh Pattabiraman

By: /s/ Arun Raghupathy
_____ Arun Raghupathy

[SIGNATURE PAGE TO REGISTRATION RIGHTS AGREEMENT]

AT&T:

AT&T Investment & Tower Holdings, LLC

By: /s/ Andrew Gillard
Name: Andrew Gillard
Title: Vice President

TRUSTS:

GANESH M PATTABIRAMAN FAMILY TRUST

By: /s/ Ganesh Pattabiraman

PARSONS FAMILY GENERATION SKIPPING TRUST

By: /s/ Gary M. Parsons

[SIGNATURE PAGE TO REGISTRATION RIGHTS AGREEMENT]

EXHIBIT A

Joinder Agreement

This Joinder Agreement (this "Joinder") is entered into as of _____ by and between the undersigned (the "Assignee") and NextNav Inc. (the "Company").

WHEREAS, the Company has entered into that Registration Rights Agreement, dated as of October 28, 2021 (the "Registration Rights Agreement") by and among the Company and the Holders;

WHEREAS, capitalized terms used but not defined herein shall have the respective meanings ascribed to them in the Registration Rights Agreement;

WHEREAS, Assignee is a Permitted Transferee of _____ (the "Assigning Holder");

WHEREAS, pursuant to Section 6.2 of the Registration Rights Agreement, a Permitted Transferee must agree to be bound by the transfer restrictions set forth in the Registration Rights Agreement;

NOW, THEREFORE:

1. Assignee represents and warrants to the Company that the Assignee has reviewed this Joinder and the Registration Rights Agreement in its entirety, and fully understands all provisions of this Joinder and the Registration Rights Agreement.
2. Assignee is hereby made a party to the Registration Rights Agreement as a Holder thereunder.
3. Assignee hereby agrees to be bound by all the terms and provisions of the Registration Rights Agreement as a "Holder."

[The remainder of this page is intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have executed this Joinder as of the date first above written.

THE ASSIGNEE

[NAME]

By: _____
Name:
Title:

THE COMPANY

NEXTNAV INC.

By: _____
Name:
Title:

NEXTNAV INC.
LIST OF SUBSIDIARIES

Name of Subsidiary	State or Other Jurisdiction of Incorporation or Organization
Spartacus Acquisition Corporation	Delaware
NextNav MS 3, LLC	Delaware
NextNav MS 4, LLC	Delaware
NextNav MS 5, Inc.	Delaware
NextNav MS 6, LLC	Delaware
NextNav MS 7, Inc.	Delaware
NextNav Holdings, LLC	Delaware
NextNav Intermediate HoldCo, LLC	Delaware
NextNav, LLC	Delaware
Progeny LMS, LLC	Delaware
CommLabs, Inc.	Delaware
CommLabs Technology Centre Private Limited	Bangalore, India

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-261902) pertaining to the NextNav Inc. 2021 Omnibus Incentive Plan, the NextNav Inc. 2021 Employee Stock Purchase Plan, and the NextNav Holdings, LLC 2011 Unit Option and Profits Interest Plan, as amended, of our report dated March 23, 2022, with respect to the consolidated financial statements of NextNav Inc. included in this Annual Report (Form 10-K) of NextNav Inc. for the year ended December 31, 2021.

/s/ Ernst and Young LLP

Tysons, Virginia
March 23, 2022

**Certification of Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Ganesh Pattabiraman, certify that:

1. I have reviewed this annual report on Form 10-K of NextNav 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) [Paragraph intentionally omitted in accordance with SEC Release Nos. 34-47986 and 34-54942];
 - (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 23, 2022

/s/ Ganesh Pattabiraman

Name: Ganesh Pattabiraman

Title: President and Chief Executive Officer

**Certification of Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Christian D. Gates, certify that:

1. I have reviewed this annual report on Form 10-K of NextNav 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) [Paragraph intentionally omitted in accordance with SEC Release Nos. 34-47986 and 34-54942];
 - (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 23, 2022

/s/ Christian D. Gates

Name: Christian D. Gates

Title: Chief Financial Officer

**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 on Form 10-K of NextNav Inc. (the "Company") for the year ended December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned each hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge, on the date hereof:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 23, 2022

/s/ Ganesh Pattabiraman

Name: Ganesh Pattabiraman
Title: President and Chief Executive Officer
(Principal Executive Officer)

Dated: March 23, 2022

/s/ Christian D. Gates

Name: Christian D. Gates
Title: Chief Financial Officer
(Principal Financial Officer)