



GALACTIC

Investor Presentation

Fall 2019



Disclaimer

Forward-Looking Statements

This presentation contains certain forward-looking statements within the meaning of the federal securities laws with respect to Virgin Galactic Holdings, Inc. ("VGH"), including statements regarding VGH's spaceflight systems, markets and expected performance. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this presentation, including but not limited to the factors, risks and uncertainties regarding VGH's business described in the "Risk Factors" section of the definitive proxy statement filed with the Securities and Exchange Commission (the "SEC") on October 10, 2019, as well as the other documents VGH files with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and VGH assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise.

Use of Projections

The financial and operating forecasts and projections contained herein represent certain estimates of Virgin Galactic as of the date thereof. Any forward-looking statement made by us in this presentation speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law. Neither SCH's nor Virgin Galactic's independent public accountants have examined, reviewed or compiled the forecasts or projections and, accordingly, neither expresses an opinion or other form of assurance with respect thereto. Furthermore none of SCH, Virgin Galactic nor their respective management teams can give any assurance that the forecasts or projections contained herein accurately represents Virgin Galactic's future operations or financial conditions. Such information is subject to a wide variety of significant business, economic and competitive risks and uncertainties, including but not limited to those set forth above under "Forward-Looking Statements" that could cause actual results to differ materially from those contained in the prospective financial information.

Accordingly, there can be no assurance that the prospective results are indicative of the future performance of SCH or Virgin Galactic or that actual results will not differ materially from those presented in the prospective financial information. Some of the assumptions upon which the projections are based inevitably will not materialize and unanticipated events may occur that could affect results. Therefore, actual results achieved during the periods covered by the projections may vary and may vary materially from the projected results. Inclusion of the prospective financial information in this presentation should not be regarded as a representation by any person that the results contained in the prospective financial information are indicative of future results or will be achieved.

Use of Data

Unless otherwise noted, the forecasted data contained in the assumptions for the projections are based upon Virgin Galactic's management estimates and publications and surveys. The information from publications has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of the included information. Neither SCH nor Virgin Galactic has independently verified any of the data from third-party sources, nor has SCH or Virgin Galactic ascertained the underlying economic assumptions relied upon therein. While such information is believed to be reliable for the purposes used herein, none of SCH, Virgin Galactic, their respective affiliates, nor their respective directors, officers, employees, members, partners, shareholders or agents make any representation or warranty with respect to the accuracy of such information.

Use of Non-GAAP Financial Matters

This presentation includes certain forward-looking non-GAAP financial measures, EBITDA and EBITDA margin, with respect to Virgin Galactic's expected future performance. Virgin Galactic defines EBITDA as net income (loss), adjusted for interest expense, interest income, income taxes, depreciation and amortization. Virgin Galactic defines EBITDA margin as EBITDA divided by revenue. These non-GAAP measures are an addition, and not a substitute for or superior to measures of financial performance prepared in accordance with GAAP and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with GAAP. Not all of the information necessary for a quantitative reconciliation of these forward-looking non-GAAP financial measures to the most directly comparable GAAP financial measures is available without unreasonable efforts at this time. Specifically, Virgin Galactic does not provide such quantitative reconciliation due to the inherent difficulty in forecasting and quantifying certain amounts that are necessary for such reconciliations, including net income (loss), accelerated depreciation and variations in effective tax rate.

Virgin Galactic believes that these forward-looking non-GAAP measures of financial results provide useful supplemental information to investors about Virgin Galactic. Virgin Galactic's management uses these forward looking non-GAAP measures to evaluate Virgin Galactic's projected financial and operating performance. However, there are a number of limitations related to the use of these non-GAAP measures and their nearest GAAP equivalents. For example, other companies may calculate non-GAAP measures differently, or may use other measures to calculate their financial performance, and therefore Virgin Galactic's non-GAAP measures may not be directly comparable to similarly titled measures of other companies.



GALACTIC



Introduction to
Virgin Galactic

December 13, 2018

First commercial space vehicle to put humans into space

First crewed space launch from US soil since 2011





February 22, 2019

First non-pilot crew member flown on a commercial space vehicle

First non-pilot crew member flown at Mach 3+

First non-pilot crew member to unstrap and float freely in space on a commercial space vehicle



First astronaut wings awarded for a space vehicle built for commercial service

May 10, 2019

Move-in initiated for world's first purpose-built commercial spaceport, Spaceport America





August 15, 2019

Reveal of Spaceport America interiors

VSS Unity

The world's first private, crewed spaceship designed for commercial service to take humans to space



VMS Eve

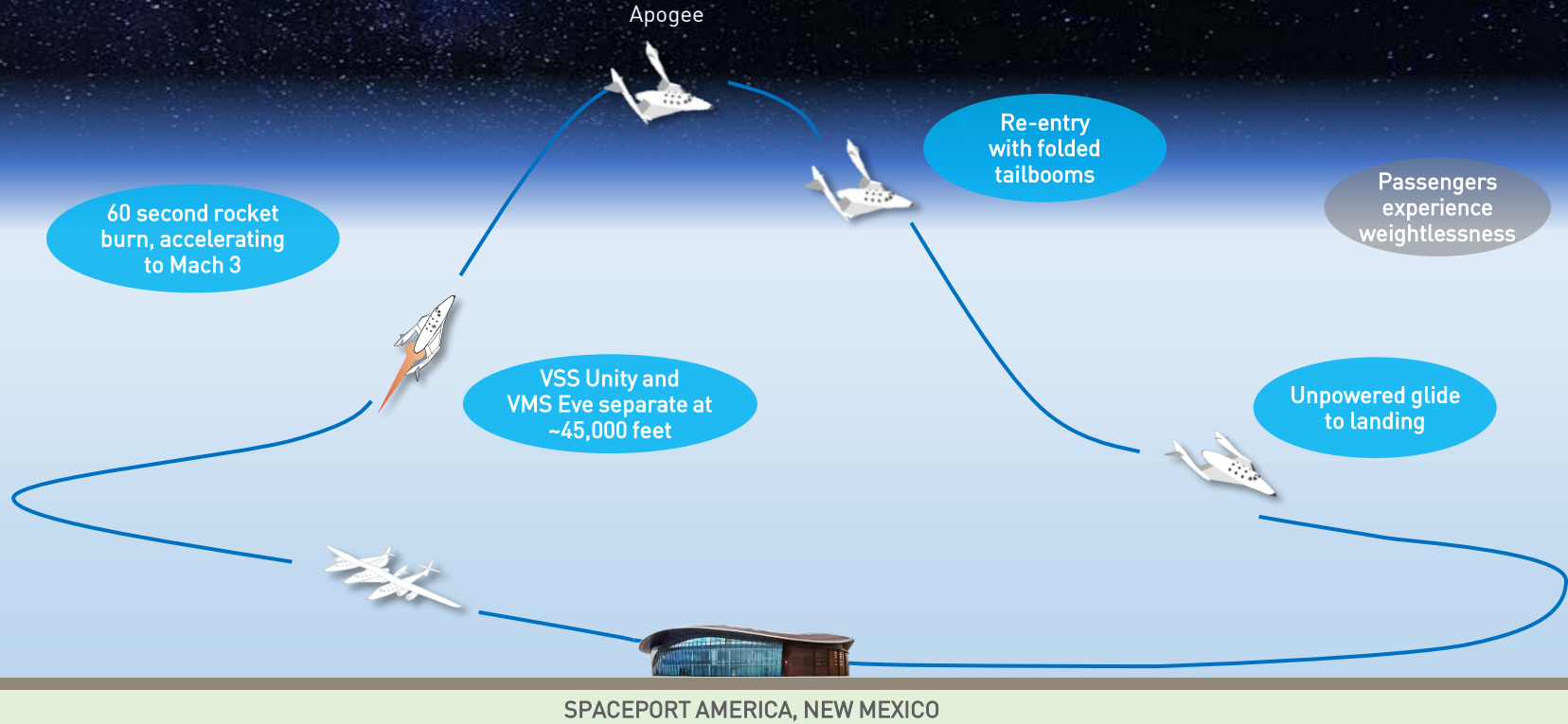
The world's largest all-composite aircraft in service



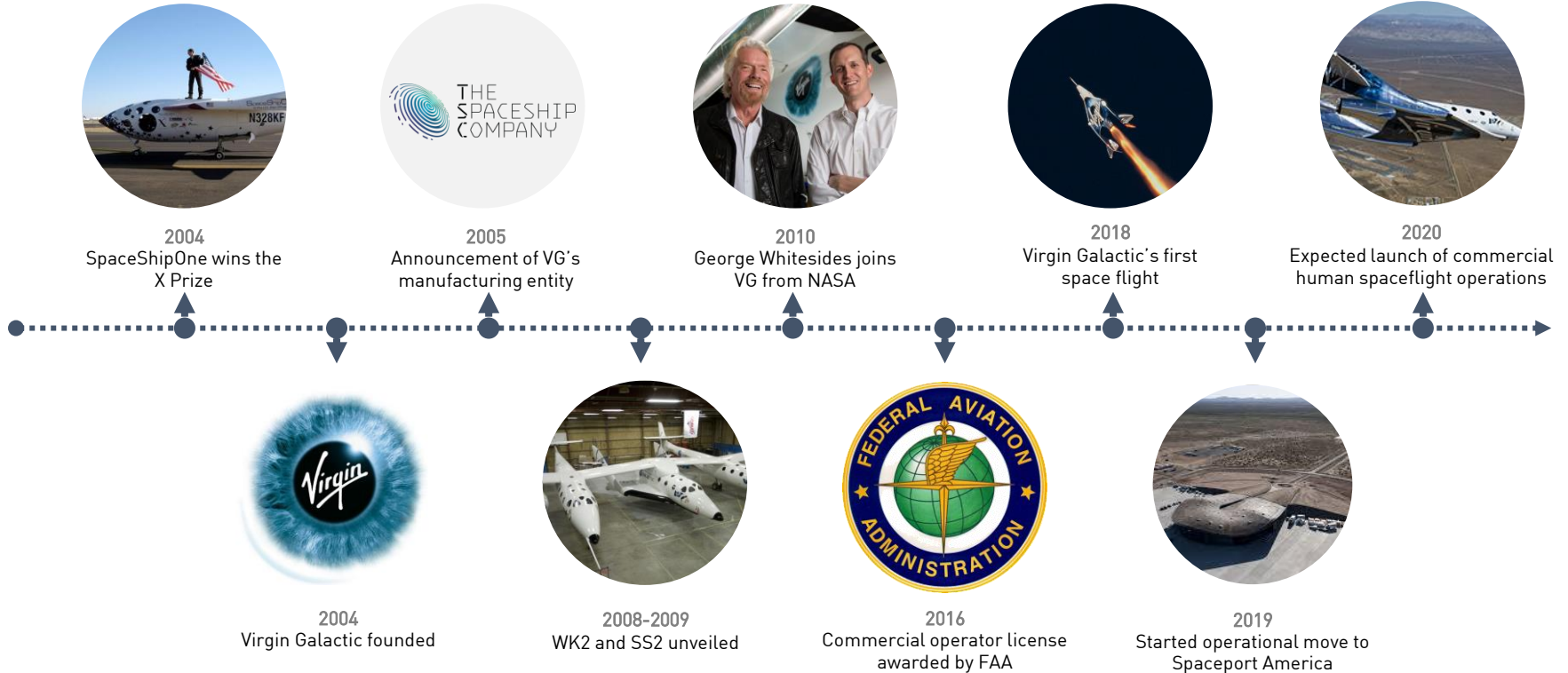
Our 600+ Customers



Virgin Galactic's Once-in-a-Lifetime Spaceflight



Virgin Galactic's History



Virgin Galactic Today



- WhiteKnightTwo (“WK2”) and SpaceShipTwo (“SS2”) operator
- Designs and manages the customer travel experience
- Headquarters: Spaceport America, New Mexico
- Employees: 190+⁽¹⁾

- Vertically integrated, end-to-end aerospace manufacturer
- Design, manufacturing and production capabilities
- Testing, validation and post-delivery support
- Headquarters: Mojave Air and Space Port, California
- Employees: 600+⁽¹⁾

World-Class Executive Team

George Whitesides
CEO, Virgin Galactic



20 Years of Experience



Jon Campagna
CFO



23 Years of Experience



Mike Moses
President, Virgin Galactic



24 Years of Experience



Enrico Palermo
President, TSC



17 Years of Experience



Stephen Attenborough
Commercial Director



30 Years of Experience



Industry-Leading Flight Team

Dave Mackay
Chief Pilot



42 Years of Experience



Mark "Forger" Stucky
Director of Flight Test



39 Years of Experience



Frederic "CJ" Sturckow
Pilot, SS2 & WK2



34 Years of Experience



Michael "Sooch" Masucci
Pilot, SS2 & WK2



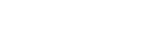
30 Years of Experience



Kelly Latimer
Pilot, SS2 & WK2



30 Years of Experience



Nicola Pecile
Pilot, SS2 & WK2



37 Years of Experience




Beth Moses
Chief Astronaut
Instructor




31 Years of Experience



 Indicates astronaut who has been to space

Limited Competition and Strong Barriers to Entry

	Years in Business	Customer Experience	Flight Experience	Takeoff / Landing	Flight Crew	Operational Milestones		
						FAA License?	Flight Test?	Flown Passenger?
	15 years	Driven by Virgin DNA 3-day pre-flight training End-to-end, including pre- and post-flight	Up to 90-minute journey 3-4 minutes floating in space	Horizontal takeoff Runway landing	2 pilots	✓	✓	✓
BLUE ORIGIN	19 years	1-day "essentials" training	11-minute journey Comparable free-floating in space	Vertical launch Parachute capsule landing	No pilot	✓	✓	-

Virgin Galactic's Near-Term Growth Strategy: Phase I

Planned Fleet Expansion

Five SS2s by end of 2023
at Spaceport America



Research Payloads

Micro-gravity and suborbital space conditions research

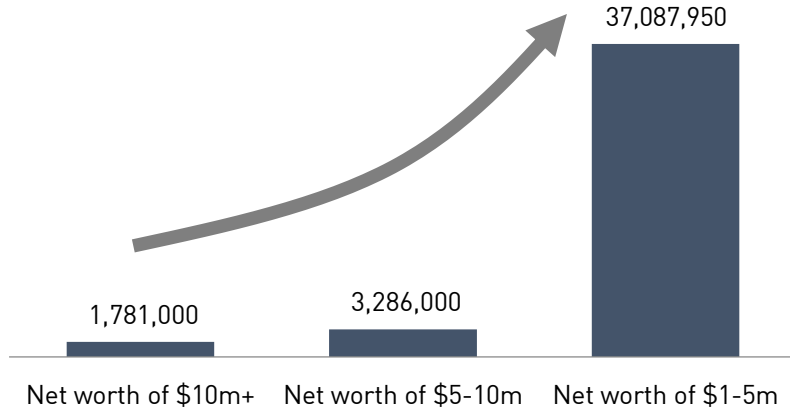
Representative Customers



TAM Expansion Through Democratization and Efficiencies of Scale: Phase II

Lower Prices Open the Market to More Individuals⁽¹⁾

Estimated # of individuals



Levers to Reduce VG's Cost Profile

Economies of Scale

Manufacturing Efficiencies

Labor Efficiencies

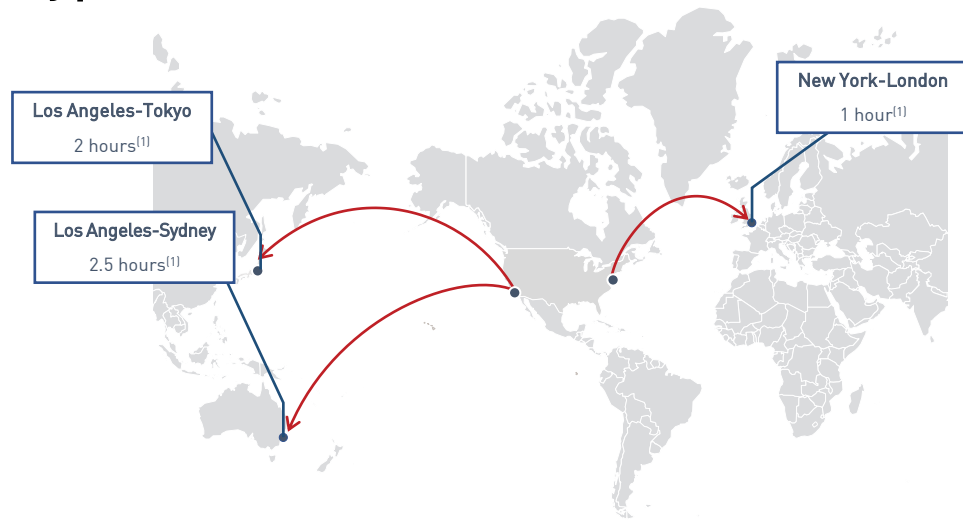
Advances in Technology

Additional Spaceports

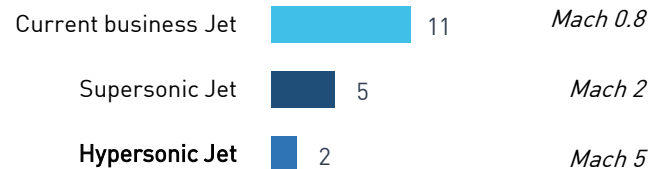
Discussions with governments underway in Italy and UAE for potential new spaceports



Hypersonic Point-to-Point Travel: Phase III



Los Angeles <-> Tokyo (hours)



- Opportunities to apply VG's proprietary technologies and capabilities for other commercial and governmental uses
- Potential opportunities to develop supersonic and hypersonic vehicles that drastically reduce travel time for point-to-point travel
- Significant market opportunity (~\$900 billion commercial aviation market and ~\$600 billion total commercial passenger travel market)

Potential Future Applications of VG's Technology and Capabilities

Third Party WK2 Sales



Hypersonic Testbed



Electric Air Mobility



High Altitude Persistent Platforms



Virgin Galactic Investment Highlights





GALACTIC



Market and Customer Overview

Virgin Galactic is Uniquely Positioned to Capture the Luxury Market

Sector Appeal

Industry Credibility

Total Addressable Market

Evolving Consumer Preferences

Brand Differentiation

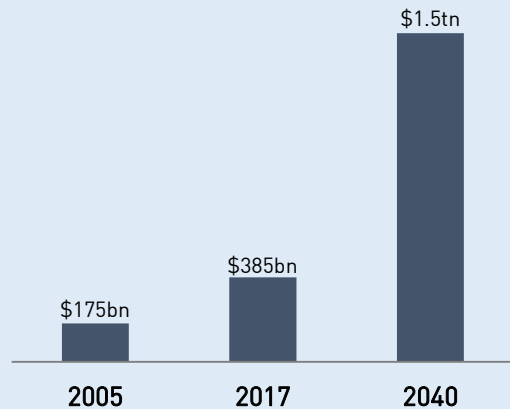


**Personal
Spaceflight**

Commercial Space Travel Coming of Age

Commercial Space Industry Size⁽¹⁾

By 2040, the commercial space industry is expected to reach 5% of U.S. GDP

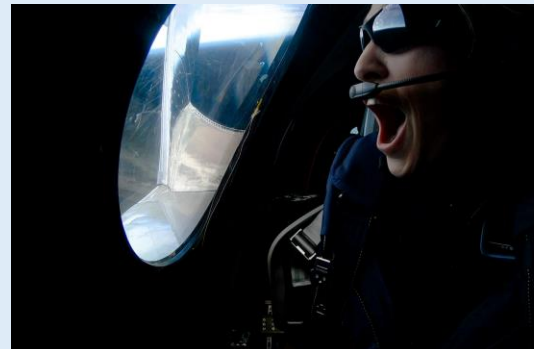


Significant Technological Advancements



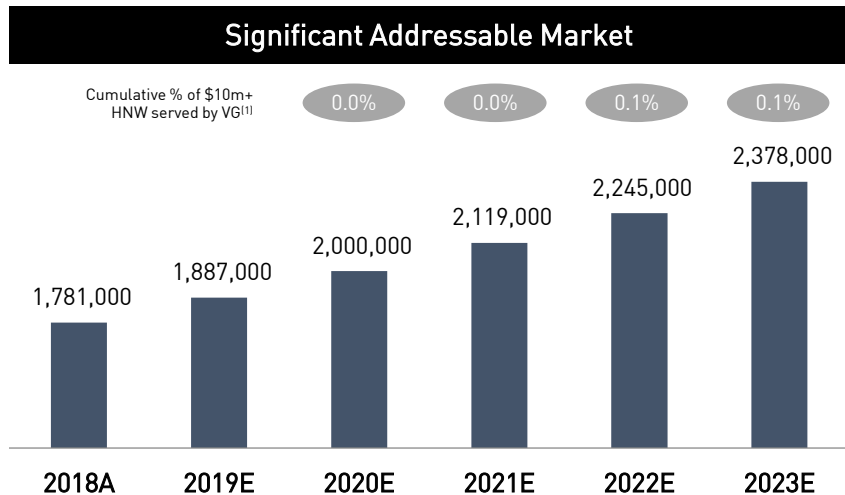
High rates of flight for new entrants

Recent Proof of Concept



Private companies gaining credibility

Significant Addressable Market



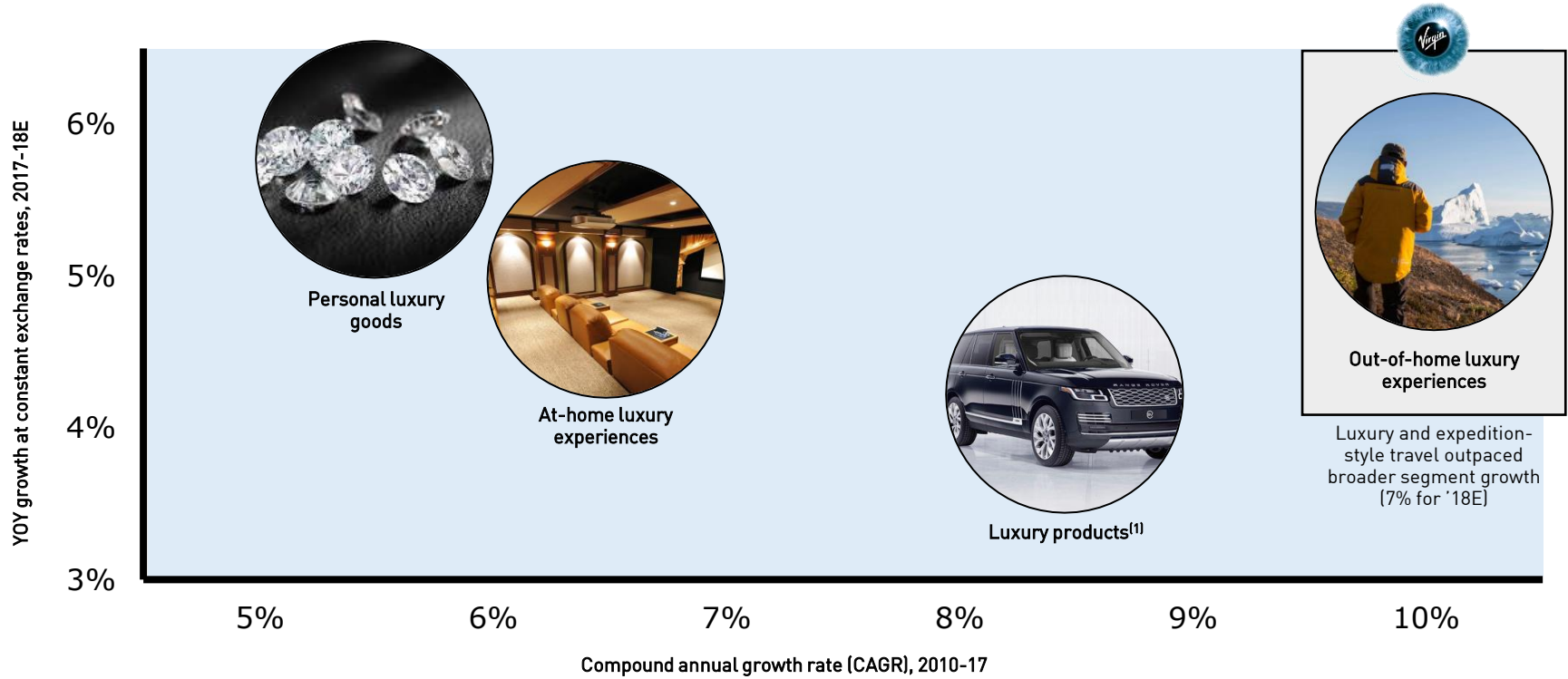
- Individuals with \$10+ million net worth expected to grow at a 2018A – 2023E CAGR of 6%
- Growth of high net worth population has historically exceeded GDP growth
- VG's business plan contemplates serving only a very small percentage of HNW individuals

Key Drivers



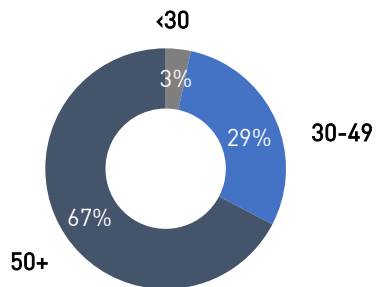
- Overall growth in global markets
- Growth in entrepreneurs and self-made wealth
- Growth of economies in emerging markets

Spending Preferences and Trends Favor Luxury Experiences



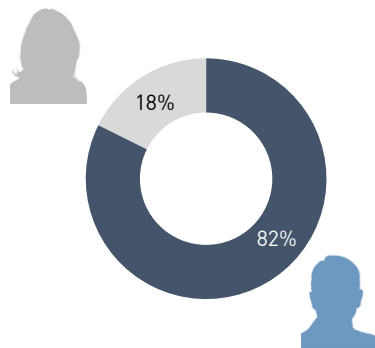
600+ Future Astronauts, ~\$80 Million of Deposits

Future Astronauts by Age



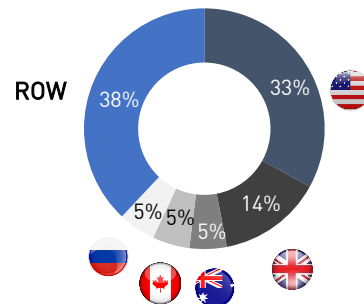
Interest across all ages, driven by shared beliefs and ambitions

Future Astronauts by Gender



Females account for 18% of committed Future Astronauts compared to 11% of current worldwide astronauts

Future Astronauts by Nation



Global interest, with strong demand and significant scope to grow geographic representation



GALACTIC



Overview of Spaceflight System and Technical Capabilities

Our Spaceflight System



VMS Eve: The Carrier Aircraft



Carries VSS Unity up to its launch altitude of approx. 45,000 feet, offering what we believe to be critical safety advantages, including horizontal takeoff and landing

Carrier Aircraft Highlights

Crew	2 pilots
Length	77.7 feet (~24 meters)
Wingspan	140.0 feet (~43 meters)

Takeoff / Landing

Max Payload Weight (Takeoff)	30,000 pounds
Max Payload Weight (Landing)	17,000 pounds
Min Runway	9,400 feet (at sea level and max weight)

Flight Capabilities (Various Missions)

Max Altitude	55,000 feet
Cruising Speed	Mach 0.6 (360+ mph)
Range	2,800 miles
Endurance	12+ hours
Total Flights	265+

VSS Unity: The Spaceship



Reusable winged spacecraft designed for air launch from VMS Eve

Spaceship Highlights

Crew	2 pilots
Length	60 feet (~18 meters)
Tail Height	18 feet (~5 meters)
Wingspan	42 feet (~13 meters)

Capacity

Max Passengers	6
Max Payload	Equivalent to 6 passengers

Flight Capabilities

Top Speed	> Mach 3
Flight Duration	Up to ~90 minutes
Total Flights (SS2 Model)	50+, including 37 glide and 8 powered

Hybrid Rocket Motor: The Motor

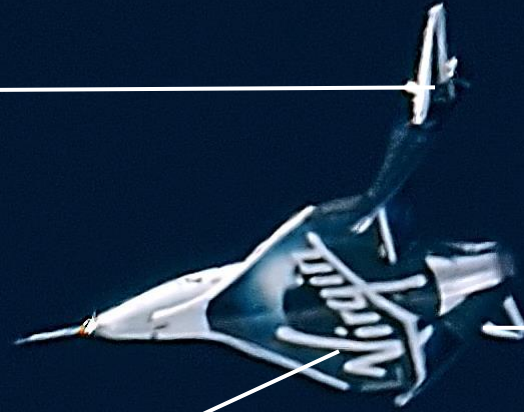


Displayed at the Moving Beyond Earth Gallery of the National Air and Space Museum

- Recognized as "most powerful hybrid rocket used in manned flight" by the Guinness Book of World Records
- Robust, yet simple human spaceflight rocket motor
- Max thrust: 72,000 lbs
- 100+ motors built to date
- Easy-to-store, replaceable fuel cartridge
- Liquid oxidizer with solid fuel grain

Feathering Re-Entry Mechanism

Patented, foldable boom tail



Once back in atmosphere, feather lowers and spaceship glides home

Shuttlecock aerodynamic profile for deceleration and stable re-entry

Virgin Galactic's Commitment to Safety

Horizontal Takeoff and Landing



Takeoff and landing on regular runways similar to a typical airliner

Two Pilots



Creates redundancy in operations and in-space safety

Mothership Engine Reliability



Highly reliable and rigorously tested jet engines for first 45,000 feet of journey

Hybrid Rocket Motor



Robust yet simple design with simple shut-off control

Flight Controls



Simple operations aimed at maintaining reliability

Seating



Two position seats to favorably redirect G loads in accordance with phases of flight

Re-Entry Mechanism



Proprietary feathering system for re-entry via gentle glide descent

Abort Architecture



System designed to allow for abort at any phase of the flight

Full Lifecycle Aerospace Development Expertise



Design, Modeling
and Analysis

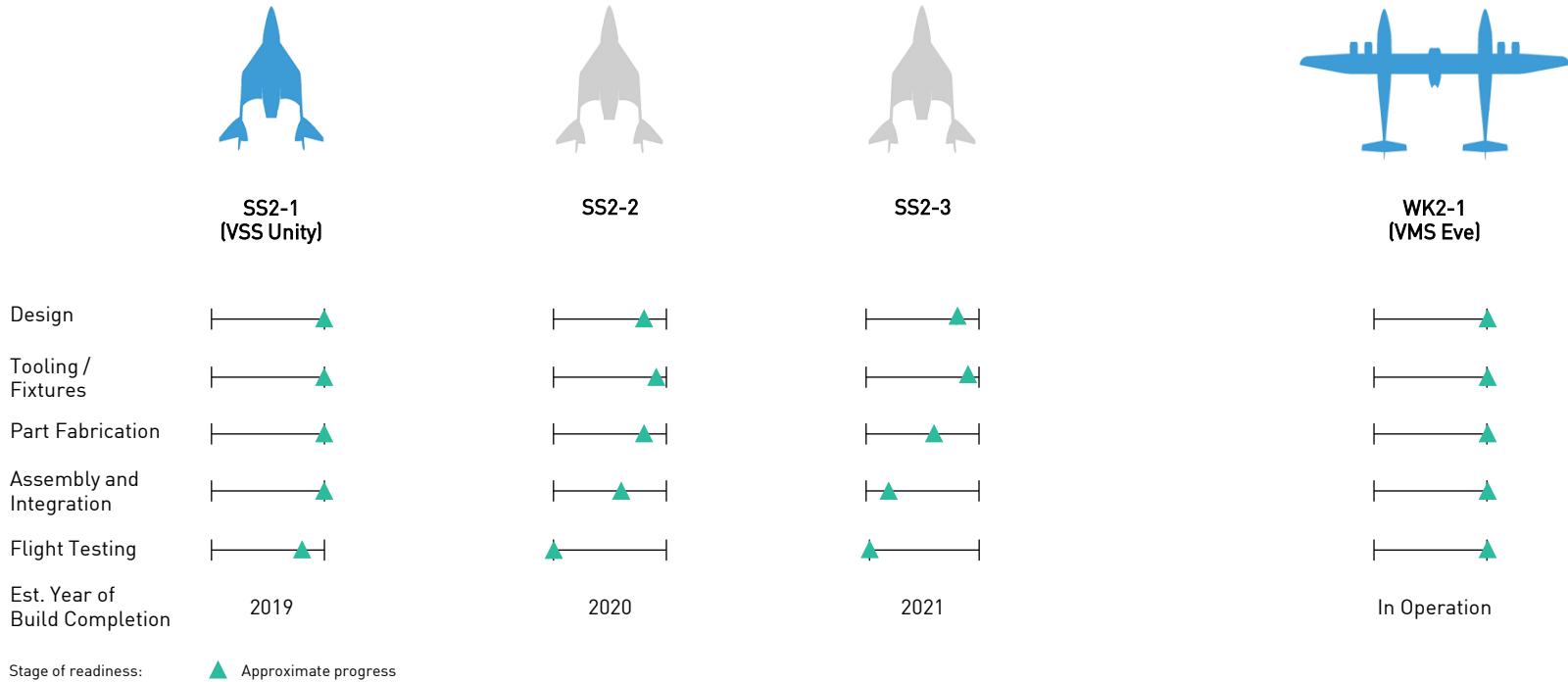
Manufacturing

Assembly and Systems
Integration

Testing and Validation

Capabilities cover the full range of design, manufacturing, ground testing, flight testing and post-delivery support

Fleet Build Progress and Expected Expansion Schedule

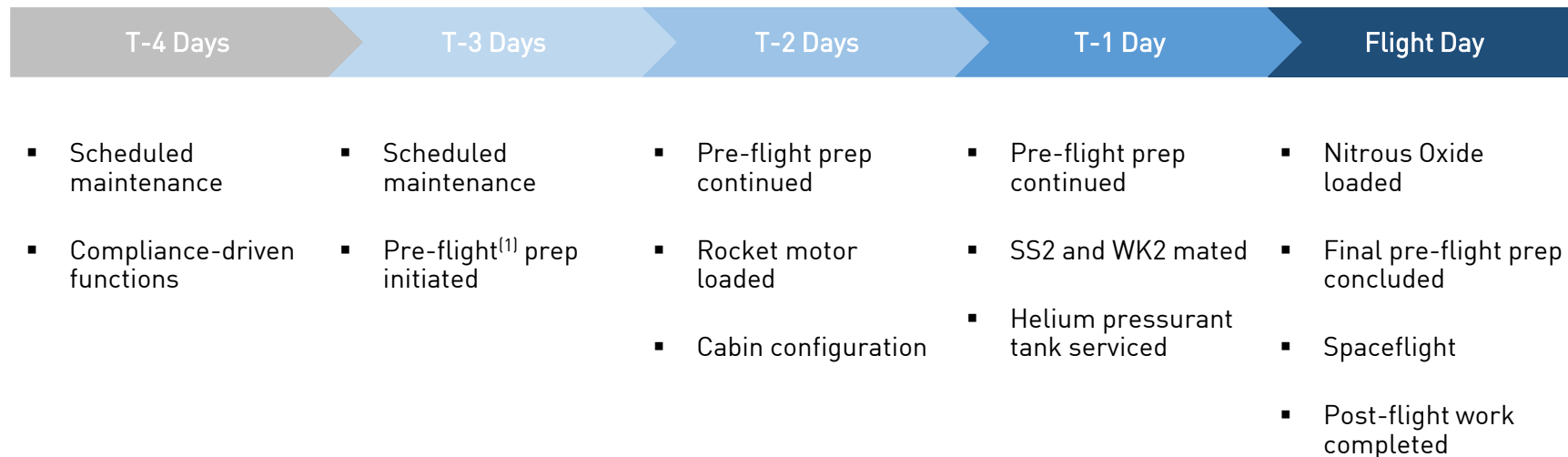


Overview of Virgin Galactic's Ground Operations

- Emphasis on **safety, reliability and maintainability** for vehicles rooted in decades of best practices in airline / charter operations
- **Prudent planned maintenance** assumptions during ramp-up period
- Learnings from the maintenance program during ramp-up period will **support the enhancement and efficient evolution of the program** to support high flight rate operations



Illustrative 5-Day SS2 Operational Flow



Shorter Launch Preparation Times Compared to Traditional Vehicles

Target WK2 and SS2 Operational Parameters



- Anticipated monthly flight rate: **15 flights** per vehicle (at scale)
- Supported by **2 days of scheduled maintenance** per week
- **5-day scheduled maintenance** period per month, coinciding with SS2 downtime

- Anticipated monthly flight rate: **5 flights** per vehicle (at scale)
- Supported by **5-day operational turnaround** after each flight
- **7-day scheduled maintenance** period per 5-flight cycle; scheduled **annual downtime of 1 month**



Pre-Flight Activity	Duration
WK2 Fueling	< 30 minutes
Rocket Motor CTN Physical Install	4 hours
SS2 Jack and Mate to WK2	< 1 hour
Pressurant Tank Load / Boost	1 hour
Nitrous Load	2.5 hours

WK2 Fueling < 30 minutes

Rocket Motor CTN Physical Install 4 hours

SS2 Jack and Mate to WK2 < 1 hour

Pressurant Tank Load / Boost 1 hour

Nitrous Load 2.5 hours



GALACTIC



Financial
Overview

Key Assumptions

Start of Commercial Operations

- Financial projections assume **June 2020 commencement of commercial operations**, starting with one vehicle in service

Flight Rates

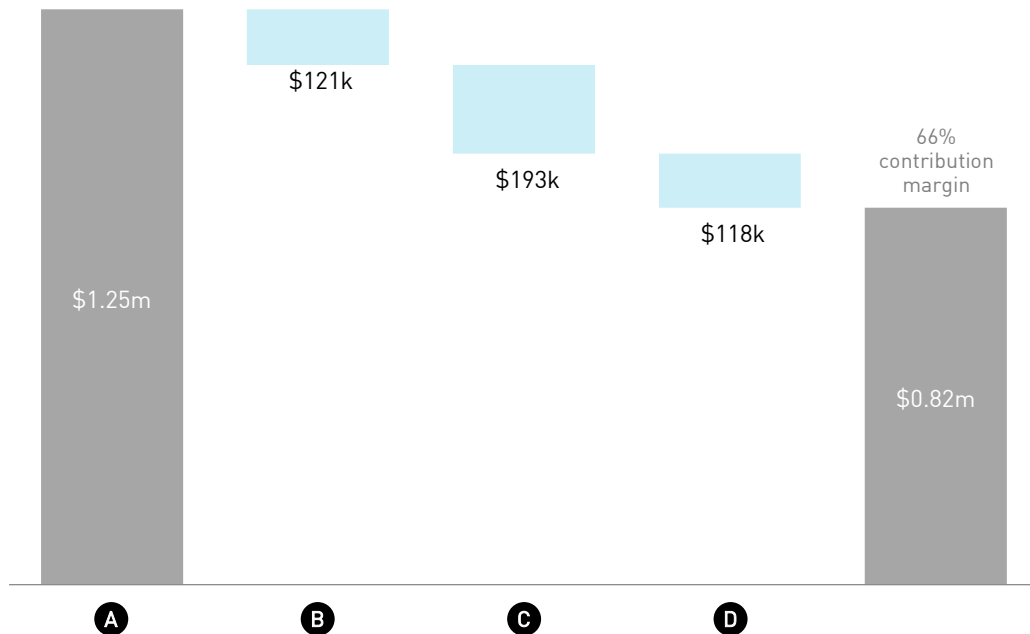
- Modest flight rates at commercial start, scaling up to an **ultimate anticipated flight rate of 5 per month** in 2022 and thereafter

Vehicle Build and Operational Stats

- Second and third SS2 vehicles (SS2-2, SS2-3) are currently under construction and are expected to be complete by the end of 2020 and 2021, respectively
- Build time of **approximately 24 months for SS2-4 through SS2-5**
- While vehicles have capacity for 6 passengers, early projection years assume lower passengers per flight
 - SS2-1 (VSS Unity) passengers per flight starts at 4, increasing to 5 in 2021 onwards
 - SS2-2 and SS2-3 passengers per flight start at 5, increasing to 6 in 2021 onwards
 - **Run-rate of 6 passengers per flight** throughout life of SS2-4 and SS2-5 vehicles

Highly Attractive Single Flight Unit Economics

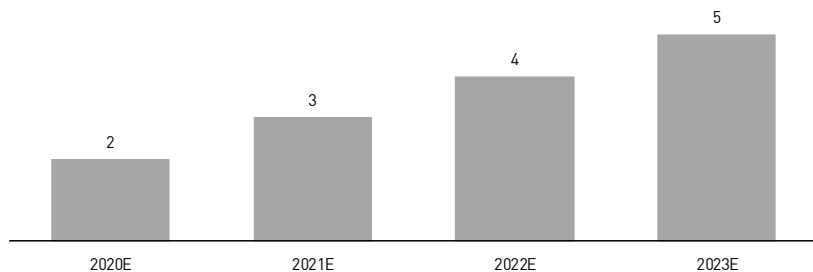
Contribution Analysis⁽¹⁾



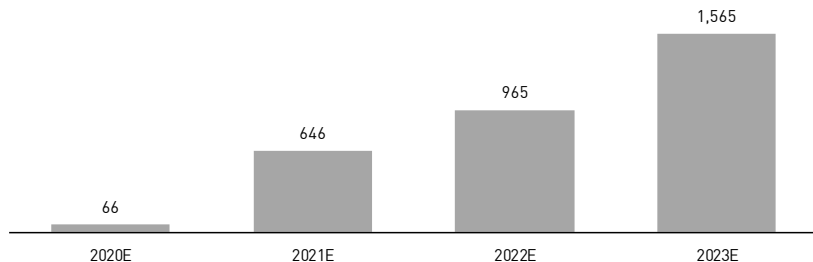
- A Ticketed revenue:** Assumes flight carries 5 passengers at \$250,000 per passenger
- B Rocket motor and fuel costs:** Assumes price per rocket motor decreases over time via additional investments in advanced manufacturing capabilities, as well as learning curve efficiencies and benefits of economies of scale, modestly offset by inflation; fuel costs increase gradually over time, driven by inflation
- C Customer costs:** Includes costs of insurance and customer training & experience, subject to inflationary increases over time
- D Flight operations costs:** Includes fleet management and consumables and other flight related operational costs

Key Assumed Operational Metrics and Revenue

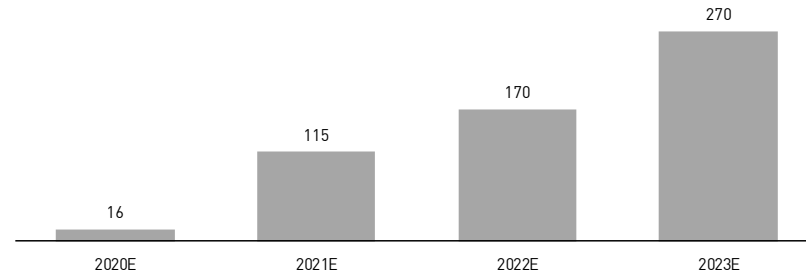
Number of Vehicles by Year End



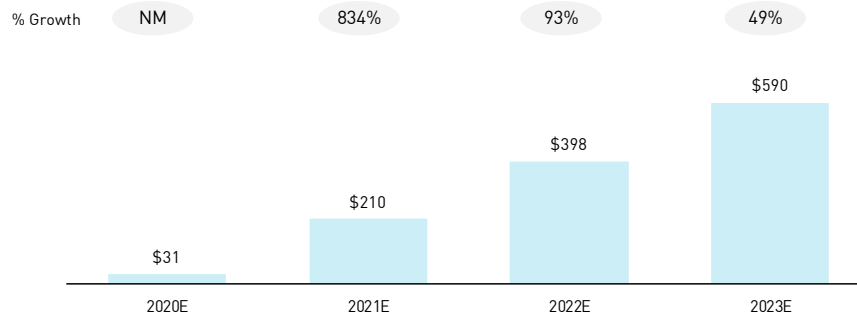
Total Passengers Flown (Annual)



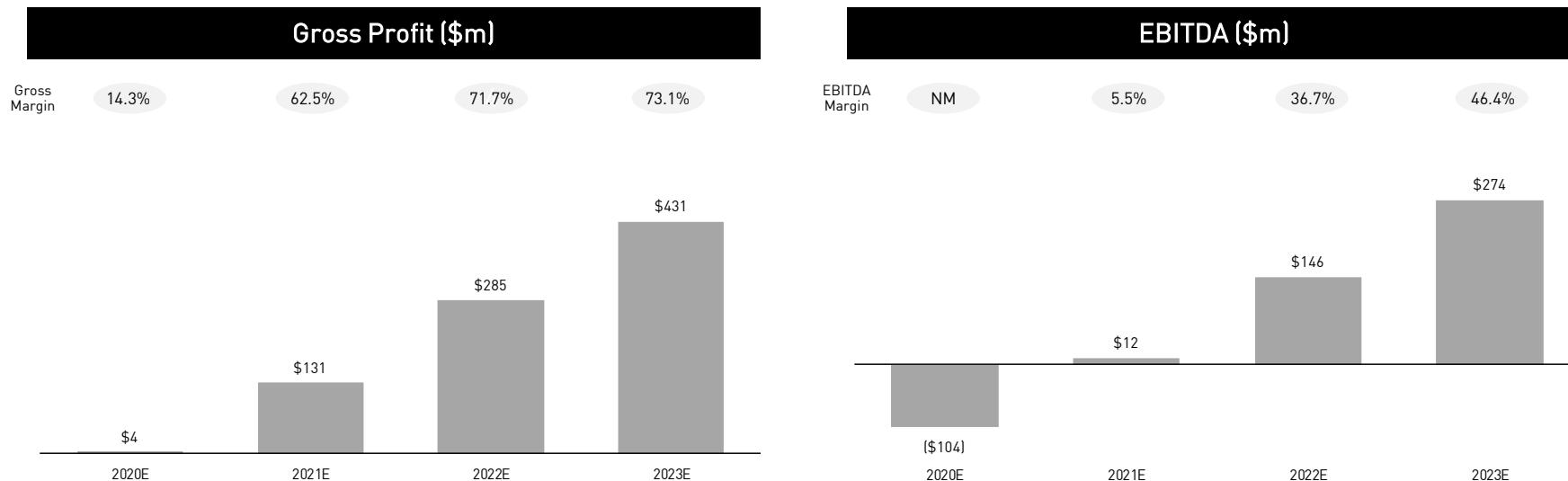
Total Flights (Annual)



Total Revenue (\$m)



Strong Profitability Highlights Strength of Business Model



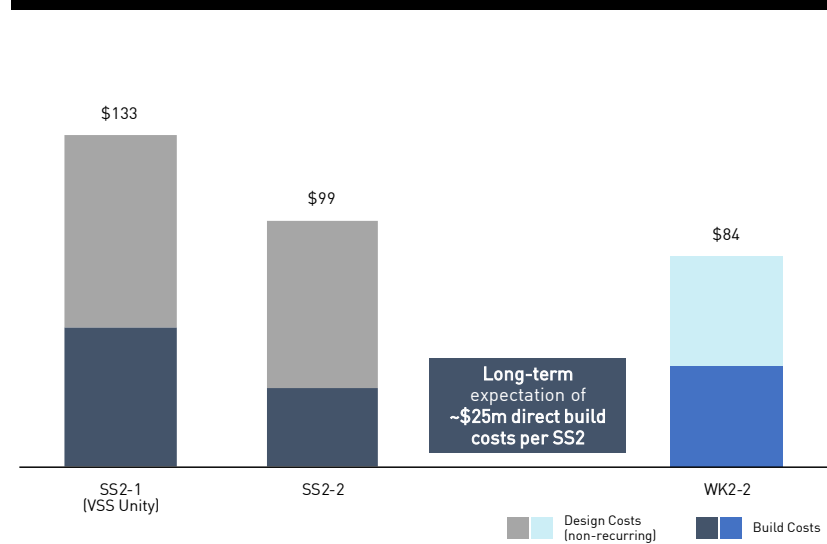
Run-rate gross and EBITDA margins are projected to reach approximately 73% and 46%, respectively, within 3 years of commencement of commercial operations, assuming operations start in June 2020

Estimated Capex Spend Over Time

Total Annual Capex (\$m)



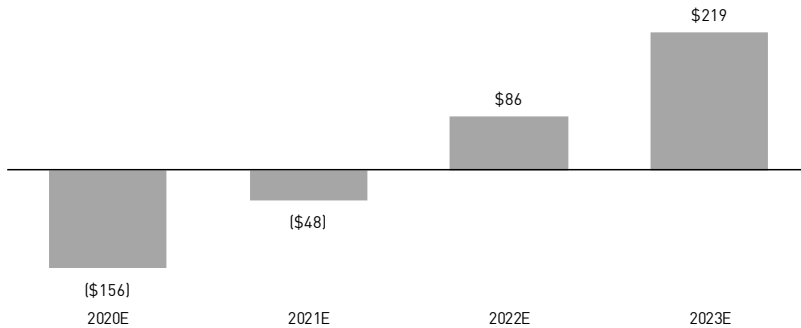
Total Direct Design and Build Costs by Vehicle (\$m)



Total costs per vehicle are expected to decrease significantly due to the learning curve and sizeable non-recurring investment costs incurred historically for the initial vehicles

Significant Liquidity to Fund Operations

EBITDA – Capex (\$m)



Liquidity

- Strong liquidity position today as a result of cash from merger with IPOA
- Company has **no debt** on its balance sheet
- Approximately \$16 million current cash burn per month (\$190 million per year)⁽¹⁾
- For illustrative purposes, \$400 million of cash from the merger will provide more than two years of runway

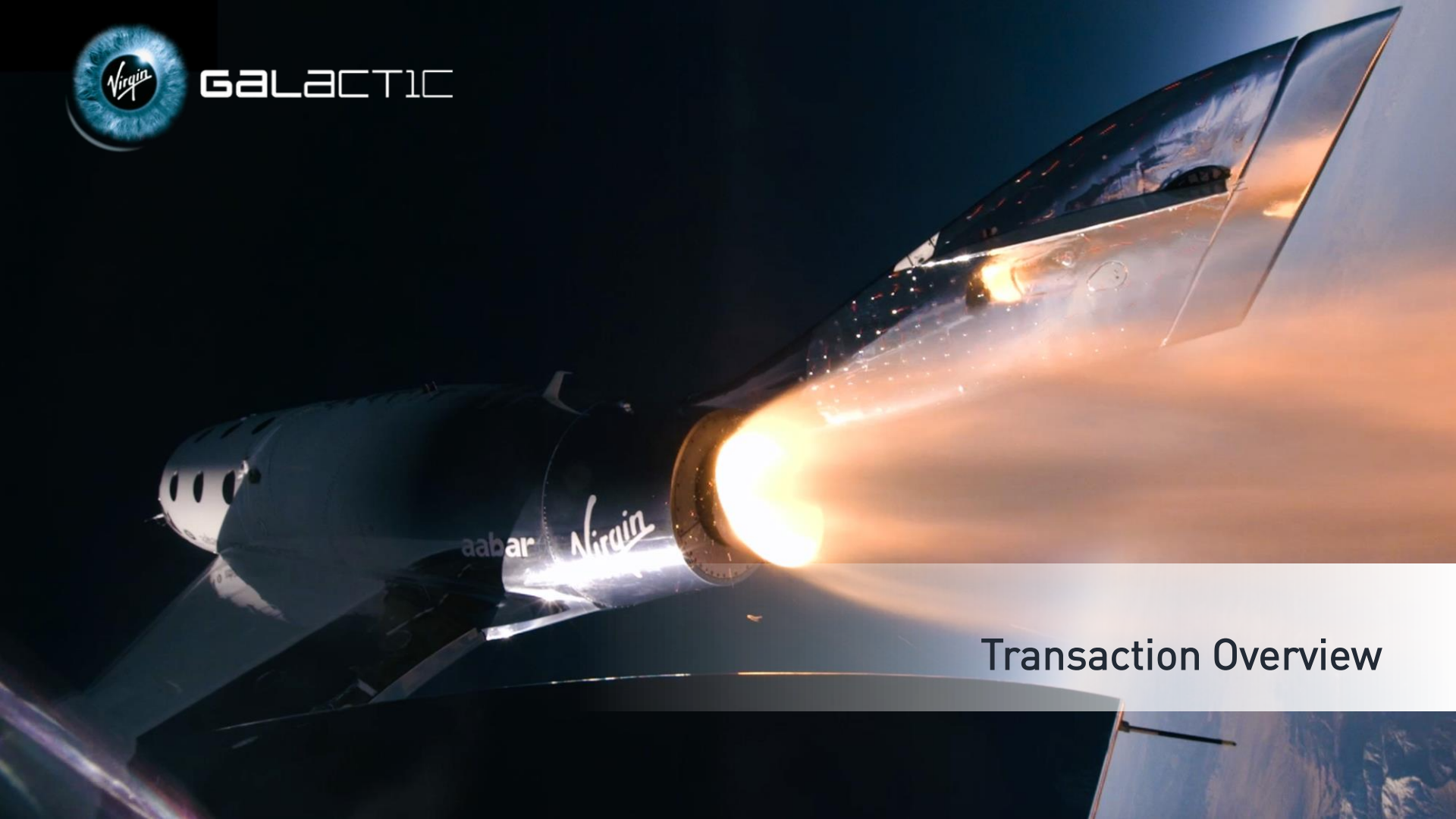
EBITDA – capex of \$86 million achieved 2 years after commencement of commercial operations

Projected Financial Summary

(\$m)	Fiscal Year Ended				CAGR '20E - '23E
	2020E	2021E	2022E	2023E	
Ticketed Revenue	\$21	\$195	\$376	\$562	
Other Revenue	10	15	21	28	
Total Revenue	\$31	\$210	\$398	\$590	167.3%
<i>% Growth</i>	<i>NM</i>	<i>580%</i>	<i>89%</i>	<i>48%</i>	
Rocket Motor Costs & Fuel Costs	(\$5)	(\$24)	(\$36)	(\$41)	
Flight Operations & Maintenance	(19)	(30)	(37)	(50)	
Customer Costs & Insurance	(3)	(24)	(40)	(68)	
Total COGS	(26)	(79)	(113)	(159)	
Gross Profit	\$4	\$131	\$285	\$431	360.3%
<i>% Margin</i>	<i>14.3%</i>	<i>62.5%</i>	<i>71.7%</i>	<i>73.1%</i>	
Operating Expenses	(\$109)	(\$120)	(\$139)	(\$158)	
EBITDA	(\$104)	\$12	\$146	\$274	NM
<i>% Margin</i>	<i>NM</i>	<i>5.5%</i>	<i>36.7%</i>	<i>46.4%</i>	
Capex	(\$52)	(\$59)	(\$60)	(\$54)	



GALACTIC



Virgin

Transaction Overview

Transaction Summary

- Pro forma **enterprise value of \$1.5 billion**
- 2.5x CY2023E revenue and 5.5x CY2023E EBITDA
- IPOA founder committed to invest \$100 million at \$10.00 per share in connection with the business combination⁽¹⁾
- Existing Virgin Galactic shareholders receive up to \$274 million in cash consideration at close and approximately 103 million shares of rollover equity⁽²⁾
- Addition of Chamath Palihapitiya as Chairman and Adam Bain as a Director to Virgin Galactic's Board of Directors
- **Completion of transaction is expected in Q4 2019**



⁽¹⁾
⁽²⁾

Such shares to be acquired from the pro forma company or from Virgin Galactic's existing shareholders at the discretion of the existing shareholders.
Assumes that existing Virgin Galactic shareholders receive \$174 million of proceeds via a repurchase of rollover equity shares by IPOA and \$100 million of proceeds via a sale to IPOA founder pursuant to the co-investment commitment.

Valuation and Sources & Uses

Pro Forma Valuation

(\$ in millions except per share values)

IPOA Illustrative Share Price	\$10.00
Pro Forma Shares Outstanding (millions) ⁽¹⁾	195.1
Total Equity Value	\$1,951
Cash on Balance Sheet	(452)
Total Enterprise Value	\$1,499

Pro Forma Enterprise Value / Revenue

3.8x (Based on 2022E Revenue of \$398 Million)

2.5x (Based on 2023E Revenue of \$590 Million)

Pro Forma Enterprise Value / EBITDA⁽²⁾

10.3 (Based on 2022E EBITDA of \$146 Million)

5.5x (Based on 2023E EBITDA of \$274 Million)

Sources & Uses⁽³⁾

(\$ in millions except per share values)

Sources	
Cash from IPOA	\$674
IPOA Founder Co-Investment	100
Total Sources	\$774
Uses	
Cash to Balance Sheet	\$452
Cash to Selling Shareholders	274 ⁽⁴⁾
Illustrative Transaction Fees	48
Total Uses	\$774

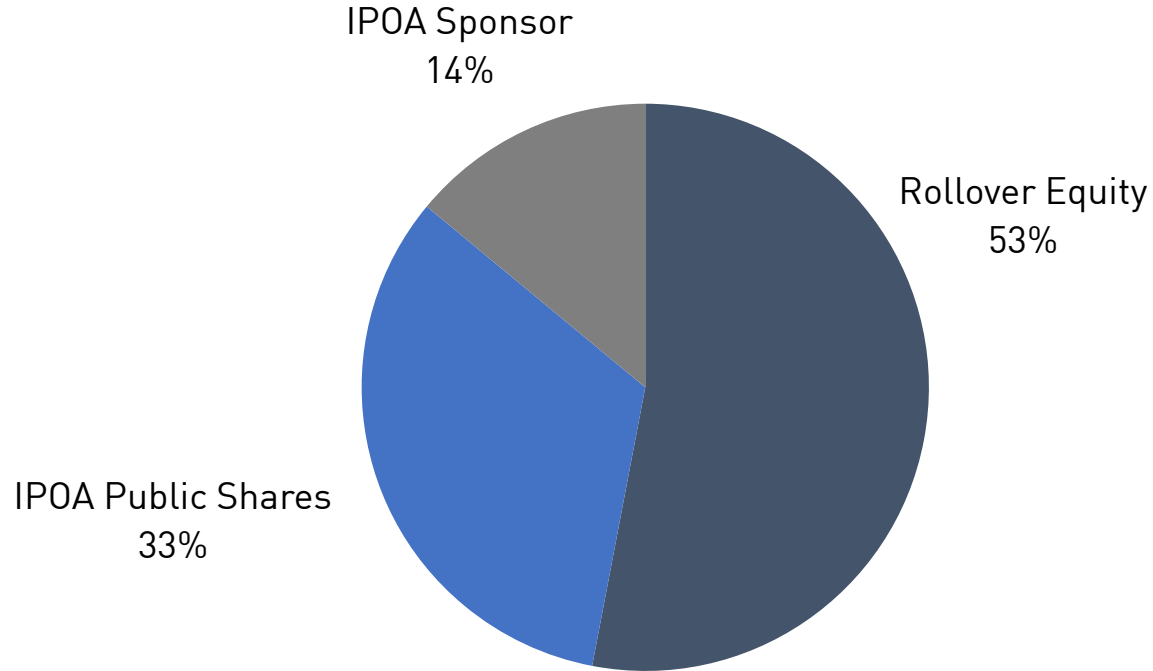
Cash to be held on balance sheet to support continued growth and commercialization



(1)
(2)
(3)
(4)

Total shares includes 102.6 million rollover equity shares, 65.2 million IPOA public shares, 17.3 million IPOA founder shares (including 1.5 million Director RSU Awards) and 10.0 million shares from IPOA Founder's co-investment. Assumes no additional redemptions.
EBITDA is a non-GAAP measure. Please refer to "Use of Non-GAAP Financial Matters" for additional information regarding the non-GAAP measures included in this presentation.
Calculated as of June 30, 2019, after giving effect to redemptions in connection with our shareholder meeting on September 9, 2019, at an assumed price of \$10.53 per share (which price is based on trust account figures as of June 30, 2019). Assumes no additional redemptions.
Assumes that existing Virgin Galactic shareholders receive \$174 million of proceeds via a repurchase of rollover equity shares by IPOA and \$100 million of proceeds via a sale to IPOA founder pursuant to the co-investment commitment.

Pro Forma Ownership⁽¹⁾

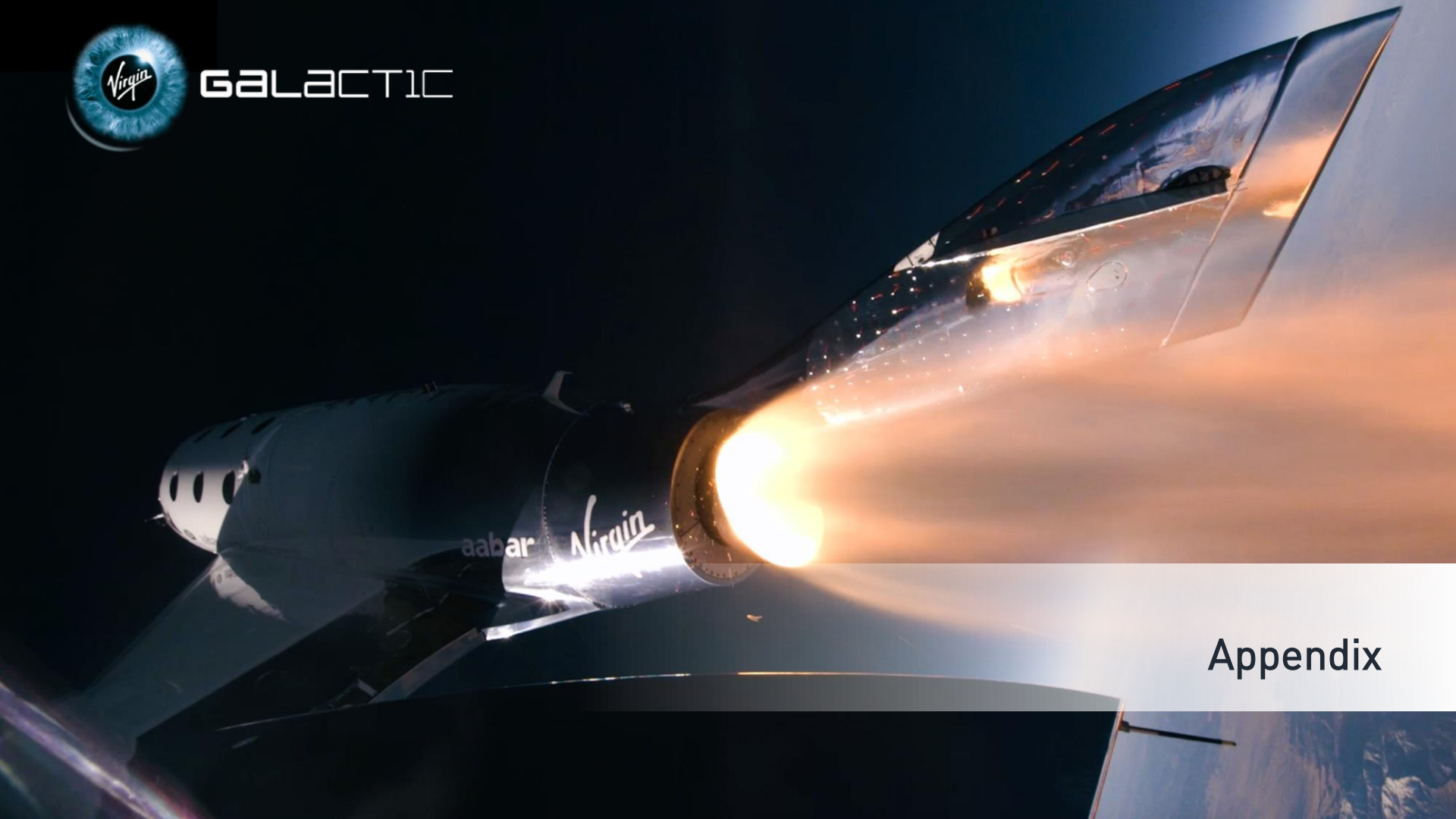


Virgin Galactic Investment Highlights





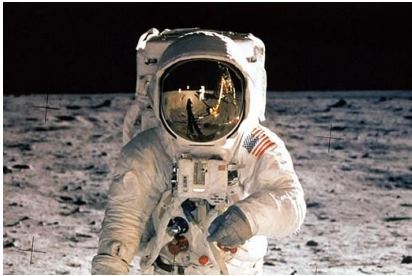
GALACTIC



Appendix

Who Are Our Customers?

The Space Enthusiast



“I have wanted to go since I watched those first steps on a fuzzy black and white TV”



69 years old



Background: Set up and sold engineering business, now semi retired

The Adventurer



“I’ve done it all, but this is the ultimate tick on my bucket list!”



45 years old



Background: Started a pharmaceutical company

The Virgin Brand Lover



“If Richard is doing it, and Virgin is in charge of it, I’m in!”



33 years old



Background: Investment banker

The Entrepreneur



“Space is the zeitgeist, and I want to be part of it.”



42 years old



Background: Entrepreneur and investor

Driving Future Astronaut Engagement



Land Rover Partnership

- Power of the brand and the community enables one-of-a-kind partnership collaborations
- Astronaut Edition Range Rover is only available to signed-up Future Astronauts and embodies all that they love about VG



Building the Most Exclusive Community in the World

The World Above



What: A clear passion for space and everything within it

How:

- Eclipse festival
- CERN experience
- Evening with astronaut Tim Peake
- Intimate lunch with Professor Stephen Hawking

The Final Frontier



What: A thirst for exploration and adrenaline

How:

- Morocco driving trip with Land Rover
- Formula E races around the world hosted by Virgin Racing
- Virgin Strive challenges

The Finer Stuff



What: An appreciation for the finer things in life

How:

- Annual Virgin Galactic Necker trip with Richard
- Wine trip, hosted by a master maker in Beaune
- Ice hotels to game reserves, working with Virgin partners

The World Within



What: Giving back, and inspiring the next generation of innovators

How:

- Galactic Unite initiatives:
 - ✓ Scholarships
 - ✓ Mentoring
 - ✓ Space chats