

By Kristen Hanich, Senior Analyst, Parks Associates

Synopsis	Upgrade Drivers														
<p>Driven by COVID-19, businesses are seeking solutions to better support a remote workforce, crossing the enterprise and residential markets. Similarly, demand has increased not just for download speeds but for uplink as well – better enabling consumers and workers to perform tasks such as video conferencing. New competition has arisen from mobile providers and satellite companies offering home internet service. This report investigates new developments in the broadband market spanning business opportunities, operational needs, and competitive factors.</p>	<p style="text-align: center;">Reasons For Upgrading Internet Service During COVID-19 Crisis US Broadband Households Upgrading Internet Service</p> <table border="1"> <caption>Reasons For Upgrading Internet Service During COVID-19 Crisis</caption> <thead> <tr> <th>Reason</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Working remotely</td> <td>65%</td> </tr> <tr> <td>Streaming TV shows and movies</td> <td>60%</td> </tr> <tr> <td>Supporting devices in home</td> <td>55%</td> </tr> <tr> <td>Virtual learning by children</td> <td>45%</td> </tr> <tr> <td>Playing video games</td> <td>40%</td> </tr> <tr> <td>Other</td> <td>5%</td> </tr> </tbody> </table> <p style="text-align: right;">© Parks Associates</p>	Reason	Percentage	Working remotely	65%	Streaming TV shows and movies	60%	Supporting devices in home	55%	Virtual learning by children	45%	Playing video games	40%	Other	5%
Reason	Percentage														
Working remotely	65%														
Streaming TV shows and movies	60%														
Supporting devices in home	55%														
Virtual learning by children	45%														
Playing video games	40%														
Other	5%														
<p>Publish Date: 2Q 21</p>	<p>“Fast, reliable uplink speeds are of key importance to subscribers – and impact competitiveness and deployment trends. With continuing remote work, growing adoption of cloud gaming services, and many consumers more comfortable using video conferencing and video calling to communicate, the importance of uplink will remain elevated compared to 2019 and earlier,” said Paul Erickson, Senior Analyst, Parks Associates.</p>														
Key Questions	<ul style="list-style-type: none"> How have COVID-19 and resulting trends impacted residential broadband? What new markets have emerged as a result of remote work? Are they likely to continue in a post-pandemic world? How has the COVID-19 pandemic impacted broadband cord-cutting trends in the United States? With pay-TV adoption declining rapidly, what new bundles and services can broadband providers offer to increase ARPU and further drive customer retention? With IoT adoption reaching a majority of US broadband households in 2020, what new markets have emerged for broadband service providers? 														

Contents	
	<p>Bottom Line</p> <p>Shifting Trends: Impact of COVID-2019/Pandemic Impact of Shelter In Place and Social Distancing New Demand for Upgraded CPE and New Value-Added Services The Broadband Coverage Gap – a Major Issue</p> <p>Remote Work Opportunities New Demand for Broadband Uplink Opportunities in Offerings Targeted to Employers</p> <p>Meeting Customer Demands Through Network Evolution Network Disaggregation: US Players Leading the Way AT&T: Achieving 75% Network Virtualization Lumen’s White Box Approach Comcast Distributed Access Architecture</p> <p>Pay-TV Decline & the Need for New Home Services Bundles Traditional Pay-TV Decline in the US Mobile Bundling and MVNO Services Value-Added Services: Smart Wi-Fi and Cybersecurity</p> <p>Wireless Internet Service Mobile-Only Households: a Slowing Phenomenon Wireless Internet Service Providers Fixed Wireless Internet Satellite Internet</p> <p>MDU Market Trends Managed Wi-Fi and Bulk Services Smart Apartment Deployments</p> <p>Conclusions and Top Trends to Watch</p> <p>Appendix</p> <p>Citations</p> <p>Attribution</p>
Figures	
	<p>Remote Work & Schooling Market</p> <p>Adoption of Connected Entertainment Products</p> <p>UpWork Pulse Survey Results on Remote Work (Q4 2020)</p> <p>Lumen Platform Visualization</p> <p>Leading Gateway-Embedded Solutions Vendors</p> <p>WISP Architecture (credit: WISPA)</p> <p>Starry Internet Architecture (Source: Starry)</p> <p>MDU Housing Starts; Represents US Census Bureau and Data from RealPage</p>

List of Companies		
	AT&T	Minim
	AirTies	MRI Software
	Charter Spectrum	Nokia
	Comcast	NVIDIA
	CommScope	Plume
	CUJO AI	RealPage
	DISH Networks (DISH Fiber)	Rise Broadband
	DriveNets	SmartRent
	EchoStar (HughesNet)	Starry Internet
	Edgecore Networks	Technicolor
	Everywhere Wireless	T-Mobile
	F-Secure	UfiSpace
	IP Infusion	Verizon
	Lincoln Property Company	WISPA
	Lumen (CenturyLink)	Zobi.AI

Attributes		
Parks Associates 5080 Spectrum Drive Suite 1000W Addison, TX 75001	Published by Parks Associates © May 2021 Parks Associates Addison, Texas 75001	
800.727.5711 toll free 972.490.1113 phone 972.490.1133 fax	All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher.	
parksassociates.com sales@ parksassociates.com	Printed in the United States of America. Disclaimer Parks Associates has made every reasonable effort to ensure that all information in this report is correct. We assume no responsibility for any inadvertent errors.	