QUARTERHILL

Investor Presentation

May 2021

TSX: QTRH

OTCQX: QTRHF



We are investors in essential transportation technologies

Building from **our existing cash-generating businesses**, we are investing in the Intelligent Transportation Systems sector to become a global leader ird WiLAN



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Building and enhancing the way we move every day

Intelligent Transportation Systems (“ITS”) use technology to address the challenges in transportation infrastructure to make them **safer, more efficient, cleaner for the environment, and less costly** to maintain for governments at all levels











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ITS helps solve important challenges …

Revenue Generation



$281T global debt, 9% growth in last 12 months; governments need solutions to pay for debt

Safety



Road accidents result in 18.2 deaths per 100,000 and costs **3% of countries' GDP** on average

Environment



Road vehicles produce 24 lbs of carbon dioxide per gallon and **1/5th of all emissions**

Efficiency



Traffic congestion costs the US economy over **$120 billion per year**

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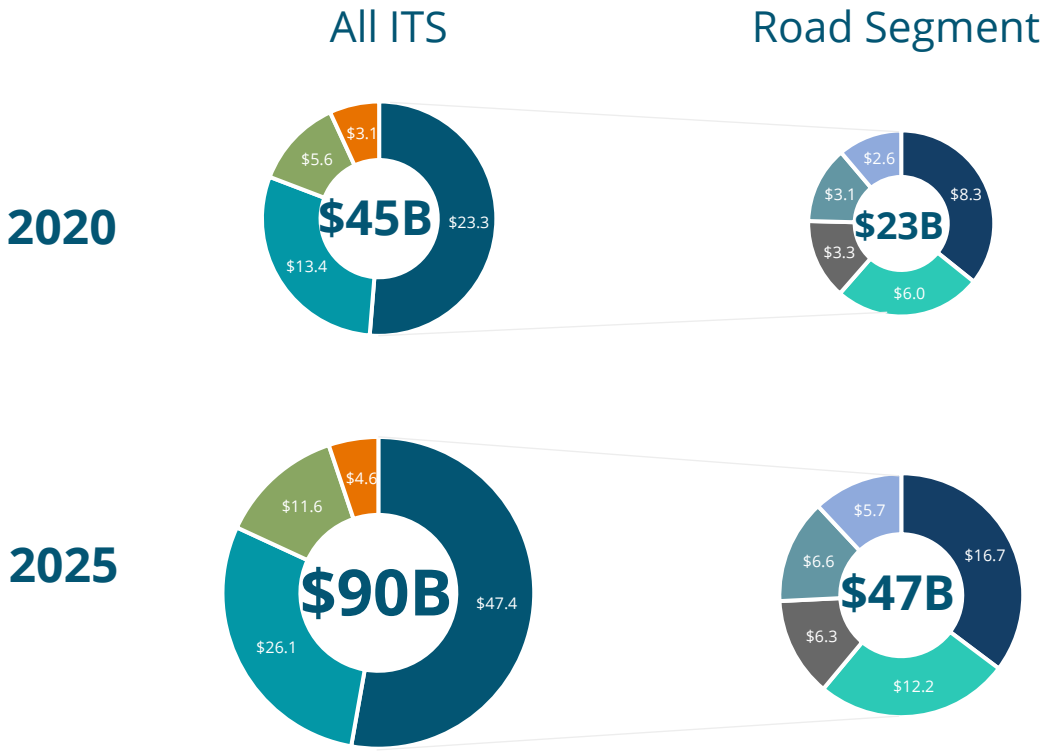
… is a stable, growing global industry …

Total Addressable Market



Global ITS market is forecasted to grow **from $45B to $90B in annual sales by 2025***

Road segment of ITS is forecasted to grow the most and, **by 2025, will exceed the total ITS market of 2020**

5 Year Compound Annual Growth Rate

2020 Base Year *

15%

Forecasted ITS CAGR of 15% to 2025 **will significantly outpace historical CAGR** of 5% to 7% due to increased stimulus spending and focus on retooling aging infrastructure

* Source: *"Intelligent Transportation System Market with COVID-19 Impact Analysis: Global Forecast to 2025"* report. www.marketsandmarkets.com

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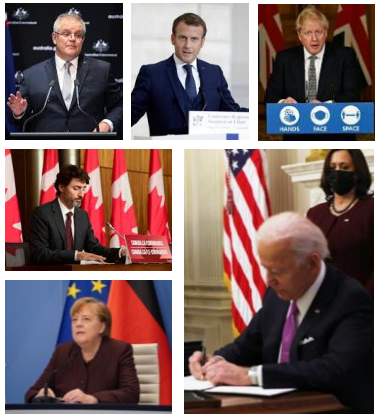
… and has compelling market tailwinds

Historically high levels of government stimulus to combat COVID …



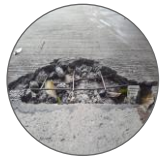
$24 trillion

WW stimulus

3X the amount spent by governments on the 2008 financial crisis

… has increased global debt to $281T or 9% in one year. **Governments urgently require new sources of revenue**.

US Case Study



US DoT reports **65% of all US roads are in poor condition**



Aging infrastructure costs the public **~$160B in wasted fuel**

President Biden has proposed a record $2 trillion to infrastructure spending, with $600 billion for transportation

* President Biden formally unveiled the US government's plan on infrastructure spending at Carpenters Pittsburgh Training Center on March 31, 2021.

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Growth of our ITS business through M&A is our focus

We are continuing to diversify through further investment into the attractive opportunities presented by the ITS industry to **grow recurring annual revenue and profit streams and increase shareholder value**











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ITS Growth Roadmap



Smart cities



Aviation



Marine



Rail

Other ITS segments

Road sub-segments



Vehicle Enforcement



Route Optimization



Public Transit



Road Tolls



Traffic Flow

Target capital deployment

up to **$400M**

over the next 5 years*

Progress to date in 2021

SENSORLINE — Closed January 5, 2021

VDS — Closed April 28, 2021

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* Actual results may vary materially and are subject to market conditions and other factors and risks that are set out in the "Important Cautionary Notes" on slide 13.

Our business is well positioned …

Stable and consistent, cash generating businesses with a strong balance sheet and no debt

2020 Fiscal Year Results

Revenue	Adjusted EBITDA	Working Capital*	Long-Term Debt*
$145M	**$31M**	**$160M**	**$nil**

* As at December 31, 2020

* As at December 31, 2020

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… with strong operating platforms …

International Road Dynamics

2020

$66M Revenue

$14M Adjusted EBITDA

- Well established, respected global player in ITS to serve as a platform for M&A growth
- 350+ customers operating in 80+ countries
- Products installed on 20,000 lanes globally

WiLAN

2020

$78M Revenue

$29M Adjusted EBITDA

- Track record over many years of strong revenue and profitability
- Portfolio of ~4,800 patents
- US$109M final judgment awarded on Apple patent infringement pending appeals

… to execute our growth strategy …

ITS platform positions us well to execute on M&A

- Eyes and ears in the market to find attractive acquisition targets
- Sales channel and cost synergies
- Lower integration risk
- Good home for sellers

Proven Management Team with track record of success

- +$20B transaction value of acquisitions and integrations
- +$500M of capital raised to fund transactions

Strong Balance Sheet

- Well capitalized with further ready access to external financing

Acquisition Criteria

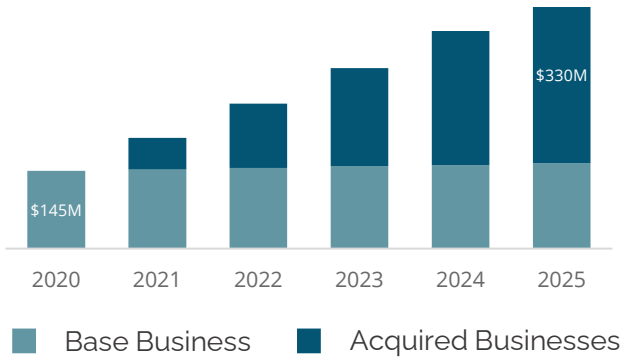
- Profitable
- Accretive valuation
- Experienced management
- Strong cash flow
- Geographic expansion
- Segment expansion

PAT Traffic an IRD Team Member · Icoms · SENSORLINE · VDS · QUARTERHILL

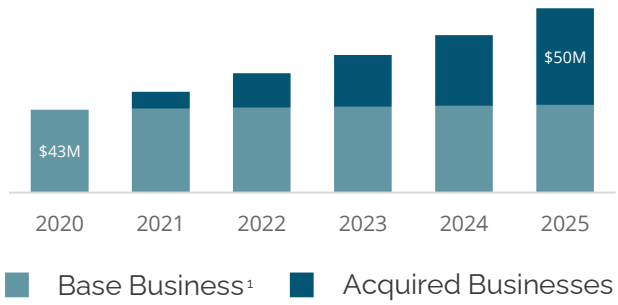
… and unlock value through scale

Target Proforma Acquired Growth *

Revenue

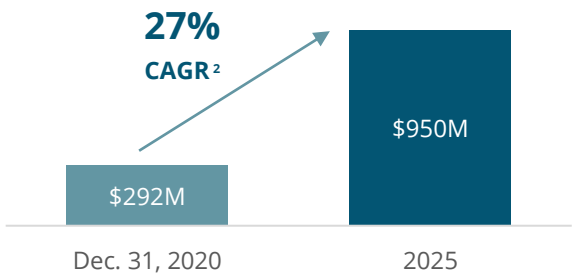


Adjusted EBITDA



[1] Does not include Quarterhill corporate cost centre overheads

QTRH Market Cap *



[2] Assumes 114M total shares outstanding

Certain Key Assumptions

- **Base Business (including WiLAN) held constant to isolate M&A growth impact for illustrative purposes**
- Current market cap reflects sum of parts valuation: ~10x Adj. EBITDA for ITS business + cons. net working capital
- Tuck-in targets acquired at 5x to 9x EBITDA; larger or high-growth targets may be acquired at higher multiples
- Quarterhill valuation multiple expected to grow to ITS market average of 14x as ITS operations scale
- Acquisitions will be partially financed through conservative levels of debt / Adj. EBITDA of acquired entities

Market Cap / Adj. EBITDA

14x

Average Market Cap / EBITDA of select comparable public companies within ITS and IOT/Telematics industries between $100M to $800M of annual revenue

* Actual results may vary materially and are subject to market conditions and other factors and risks that are set out in the "Important Cautionary Notes" on slide 2.

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Important Cautionary Notes

Certain statements in this presentation, other than statements of historical fact, may include forward-looking information that involves various risks and uncertainties that face the Company. Such statements may contain words and expressions based on management's current assumptions and expectations related to estimates and assumptions made by Quarterhill in light of its experience and its perception of historical trends, current conditions, expected future developments and the expected effects of new business strategies, as well as other factors.

There can be no assurance that any statements of forward-looking information contained in this document will prove to be accurate. Actual results and future events could differ materially from those anticipated in such statements. These and all subsequent written and oral statements containing forward-looking information are based on the estimates and opinions of management on the dates they are made and expressly qualified in their entirety by this notice. Except as required by applicable laws, the Company assumes no obligation to update forward-looking statements should circumstances or management's estimates or opinions change.

Readers are cautioned not to place undue reliance on any statements of forward-looking information that speak only as of the date of this presentation. Additional information identifying risks and uncertainties relating to the Company's business are contained under the heading "Risk Factors" in Quarterhill's filings with the various Canadian securities regulators which are available online at www.sedar.com.

This presentation includes references to adjusted Earnings Before Interest, Taxes, Depreciation and Amortization or "Adjusted EBITDA". adjusted for: (i) income taxes; (ii) finance expense or income; (iii) amortization and impairment of intangibles; (iv) special charges and other one-time items; (v) depreciation of right-of-use assets and property, plant and equipment; (vi) stock-based compensation; (vii) foreign exchange (gain) loss; and (viii) equity inearnings and dividends from joint ventures. Unless otherwise noted, all amounts are in Canadian dollars.

Reconciliation of Net Income to Adjusted EBITDA

(1,000s)

	Q1 2021	Q1 2020
Net loss from continuing operations	($4,287)	($4,932)
Adjusted for:		
Income tax expense (recovery)	(876)	833
Foreign exchange gain	(125)	(578)
Finance expense (income), net	48	(126)
Special charges	39	213
Depreciation and amortization	4,999	5,211
Stock based compensation expense (recovery)	424	(25)
Other income	(630)	(378)
Adjusted EBITDA	**($408)**	**$218**

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