



**Altus Group**

2019  
Annual  
Information  
Form

## TABLE OF CONTENTS

1.	EXPLANATORY NOTES .....	1
2.	CORPORATE STRUCTURE .....	2
3.	GENERAL DEVELOPMENT OF ALTUS GROUP .....	3
4.	BUSINESS OF ALTUS GROUP .....	9
5.	RISK FACTORS.....	17
6.	DIVIDENDS.....	25
7.	CAPITAL STRUCTURE OF ALTUS GROUP .....	25
8.	MARKET FOR SECURITIES .....	26
9.	ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER .....	27
10.	DIRECTORS AND OFFICERS .....	27
11.	AUDIT COMMITTEE .....	29
12.	LEGAL PROCEEDINGS .....	32
13.	INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS.....	32
14.	TRANSFER AGENT AND REGISTRAR.....	32
15.	MATERIAL CONTRACTS.....	32
16.	INTERESTS OF EXPERTS .....	32
17.	ADDITIONAL INFORMATION .....	32
18.	GLOSSARY OF TERMS.....	34
19.	SCHEDULE "A" .....	i

## ALTUS GROUP LIMITED

### 1. EXPLANATORY NOTES

The information disclosed in this Annual Information Form (the “AIF”), Form 51-102F2, is stated as at December 31, 2019 or for the year ended December 31, 2019, as applicable, unless otherwise indicated.

Unless the context indicates otherwise, all references to “Altus Group”, the “Company”, “we”, “us”, “our” or similar terms refer to Altus Group Limited, and as appropriate, its subsidiaries and consolidated operations. For an explanation of other capitalized terms and expressions used herein, please refer to the “Glossary of Terms”. Unless otherwise indicated, all dollar amounts are expressed in Canadian dollars and references to “\$” are to the lawful currency of Canada.

The amounts in this Annual Information Form and the consolidated financial statements of Altus Group for the year ended December 31, 2019 have been prepared on the basis of International Financial Reporting Standards (“IFRS”).

#### **Forward-Looking Information**

Certain information in this AIF may constitute “forward-looking information” within the meaning of applicable securities legislation. All information contained in this AIF, other than statements of current and historical fact, is forward-looking information. Forward-looking information includes, but is not limited to, the discussion of our business and operating initiatives, focuses and strategies, our expectations of future performance for our various business units and our consolidated financial results, including the guidance on financial expectations, and our expectations with respect to cash flows and liquidity. Generally, forward-looking information can be identified by use of words such as “may”, “will”, “expect”, “believe”, “plan”, “would”, “could”, “remain” and other similar terminology. All of the forward-looking information in this AIF is qualified by this cautionary statement.

Forward-looking information is not, and cannot be, a guarantee of future results or events. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by us at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may cause actual results, performance or achievements, industry results or events to be materially different from those expressed or implied by the forward-looking information. The material factors or assumptions that we identified and applied in drawing conclusions or making forecasts or projections set out in the forward-looking information include, but are not limited to: engagement and product pipeline opportunities in Altus Analytics will result in associated definitive agreements; settlement volumes in Property Tax will occur on a timely basis and that assessment authorities will process appeals in a manner consistent with expectations; the successful execution of our business strategies; consistent and stable economic conditions or conditions in the financial markets; consistent and stable legislation in the various countries in which we operate; no disruptive changes in the technology environment; the opportunity to acquire accretive businesses; the successful integration of acquired businesses; and the continued availability of qualified professionals.

Inherent in the forward-looking information are known and unknown risks, uncertainties and other factors that could cause our actual results, performance or achievements, or industry results, to differ materially from any results, performance or achievements expressed or implied by such forward-looking information.

Those risks, uncertainties and other factors that could cause actual results to differ materially from the forward-looking information include, but are not limited to: general state of the economy; COVID-19 (coronavirus); currency; financial performance; financial targets; commercial real estate market; industry competition; acquisitions; cloud subscriptions transition; software renewals; professional talent; third party information; enterprise transactions; new product introductions; technological change; intellectual property; technology strategy; information technology governance and security; product pipeline; property tax appeals; legislative and regulatory changes; fixed-price and contingency engagements; appraisal and appraisal management mandates; Canadian multi-residential market; customer concentration and loss of material clients; interest rates; credit; income tax matters; health and safety hazards; contractual obligations; legal proceedings; insurance limits; dividend payments; leverage and financial covenants; share price; capital investment; and issuance of additional common shares, as described in this document under “Risk Factors”.

Given these risks, uncertainties and other factors, investors should not place undue reliance on forward-looking information as a prediction of actual results. The forward-looking information reflects management’s current expectations and beliefs regarding future events and operating performance and is based on information currently available to management. Although we have attempted to identify important factors that could cause actual results to differ materially from the forward-looking information contained herein, there are other factors that could cause results not to be as anticipated, estimated or intended. The forward-looking information contained herein is current as of the date of this AIF and, except as required under applicable law, we do not undertake to update or revise it to reflect new events or circumstances. Additionally, we undertake no obligation to comment on analyses, expectations or statements made by third parties in respect of Altus Group, our financial or operating results, or our securities.

Certain information in this AIF may be considered as “financial outlook” within the meaning of applicable securities legislation. The purpose of this financial outlook is to provide readers with disclosure regarding Altus Group’s reasonable expectations as to the anticipated results of its proposed business activities for the periods indicated. Readers are cautioned that the financial outlook may not be appropriate for other purposes.

## 2. CORPORATE STRUCTURE

### **Name, Address and Incorporation**

Altus Group Limited is governed by the *Business Corporations Act* (Ontario) (the “OBCA”) pursuant to Articles of Arrangement dated January 1, 2011. The head and registered office of the Company is located at 33 Yonge Street, Suite 500, Toronto, Ontario, Canada M5E 1G4.

### **Intercorporate Relationships**

The following is a list of the principal subsidiaries of Altus Group as at December 31, 2019 (including jurisdictions of establishment/incorporation).

The list shows the percentages of the votes attached to all voting securities of each of the subsidiaries owned by Altus Group or over which control or direction is exercised by Altus Group.

There are certain subsidiaries not shown that each represent less than 10% of the Company's total consolidated revenues and total consolidated assets (although not each subsidiary shown necessarily represents more than 10% of total consolidated assets and total consolidated revenues) and, if considered in the aggregate as a single subsidiary, represent less than 20% of total consolidated revenues and total consolidated assets.

Subsidiary	Voting Securities	Jurisdiction of Incorporation
Altus Group Asia Pacific Limited	100%	Ontario
Altus Group Australia Pty Limited	100%	Australia
Altus Group Consulting Pty Limited	100%	Australia
Altus Group Cost Management Pty Limited	100%	Australia
Estate Master Group Holding Pty Limited	100%	Australia
Estate Master Pty Limited	100%	Australia
Altus Group (UK) Limited	100%	United Kingdom
Altus Group U.S. Inc.	100%	Delaware
ARGUS Software, Inc.	100%	Delaware
Altus Group Data Solutions Inc./Groupe Altus Gestion de Données Inc.	100%	Canada
ARGUS Software (UK) Ltd.	100%	United Kingdom
Taliance Group SAS	100%	France
Altus Geomatics General Partner Corporation	49% - Note 1	Alberta
Altus Geomatics Limited Partnership	99.9% - Note 2	Alberta
Altus Group Tax Consulting Paralegal Professional Corporation	Note 3	Ontario

Notes:

1. Two land surveyors, who are employees of Altus Geomatics Limited Partnership and registered with the Alberta Land Surveyors' Association, own 51% of the shares.
2. Altus Geomatics General Partner Corporation holds a 0.1% limited partnership interest in Altus Geomatics Limited Partnership and Altus Group Limited holds the remaining 99.9%.
3. Altus Group Tax Consulting Paralegal Professional Corporation was formed in compliance with the regulations of the Law Society of Ontario (as defined in the *Law Society Act*). The Property Tax practice in Ontario is organized as a separate professional corporation to comply with the rules and regulations of the *Law Society Act*.

### 3. GENERAL DEVELOPMENT OF ALTUS GROUP

#### Strategy

Real estate investment allocation has steadily risen while commercial real estate ("CRE") asset investment and ownership is becoming more institutionalized, complex and globalized. After years of limited

investment in technology, the CRE market is increasingly embracing technology and better utilizing data to optimize assets and mitigate risks. With the increased complexity of the CRE market, there is also a growing need for specialized expert services which industry participants continue to outsource. Altus Group is at the forefront of this opportunity, with analytics solutions and expert services that help clients navigate the complexities of the CRE market to make better informed decisions and maximize the value of their real estate assets and investments.

Through our industry leading capabilities, we remain competitively positioned to capitalize on the growing demand for a wide range of client needs in CRE technology, data and advisory solutions with a stable revenue base across economic cycles. Our key competitive strengths in the marketplace are comprised of our industry leading mission critical software and data analytics solutions, unique industry expertise across numerous asset classes and markets, our proprietary databases that contribute to successful client outcomes, and the depth and diversity of our offerings. Our global scale, existing client relationships with many of the world's largest CRE companies, and independence from brokers and asset owners/investors are also key differentiators that enhance our reputation.

### *Strategic Initiatives*

Across the business, we continually identify opportunities to maximize the value of all of our business assets. We have a disciplined approach to pursuing investments and prioritize opportunities that support our longer-term growth objectives and help us sustain market leadership in our core segments. While we focus on enhancing every business (specifically through data and technology), we are overweighting investment and innovation focus on our Altus Analytics business to leverage our global operating model and growth runway, while taking advantage of our strategic position with Property Tax to further enhance value.

In 2020, our strategy is focused on the following initiatives:

#### Altus Analytics

Our long-term objective is to transition Altus Analytics from a collection of high value point solutions to an enterprise-grade software and data analytics market leader that unifies valuation and asset management capabilities into a single, cloud-based platform that integrates numerous key workflows and enhances data-driven insights for the CRE industry. We believe this will drive substantial value for the CRE industry and clients alike, while positioning Altus Group for long-term profitable growth. To achieve this: first, we will continue to expand the global adoption of the ARGUS Enterprise ("AE") cloud platform as the foundation for CRE asset and investment management and data integration; second, we will leverage our multi-product technology stack (existing and new future applications) for CRE asset and investment management clients who require end-to-end enterprise solutions; and third, we will continue to lay the groundwork to capitalize on future growth opportunities in CRE data and for products in markets adjacent to our core offerings.

Key priorities for 2020 include:

- Continued execution of our "ARGUS Everywhere" go-to-market plan to drive existing and new customer user and product growth, geographic expansion, and global/multi-product enterprise agreements;
- Continued transition of our customers to cloud-based subscription contracts, with a goal to migrate the vast majority of our existing on-premise customers on to the cloud platform by the end of 2023;

- Continued product innovation, balanced between integration across all of our existing capabilities and developing new cloud applications that support our strategy to move clients to a cloud environment, while strategizing for new product opportunities in adjacent market verticals where we currently have limited penetration and in data-driven insights; and
- Continued growth of our Appraisal Management solutions where favourable market trends support organic growth in the U.S. and expansion into Europe and Asia Pacific, while increasingly selling our Appraisal Management solutions as part of AE transactions.

Longer term, we believe our Altus Analytics business is uniquely positioned to capitalize on the opportunity in CRE data and become a leading real estate information services provider. Our leading Altus Analytics products collect valuable and detailed CRE industry data on various asset classes and for many major CRE markets in an automated environment. As ARGUS users increasingly move into a cloud environment, the depth of our data strengthens. This provides us with a unique opportunity to re-purpose and monetize this data to drive differentiation, launch new products and strengthen our recurring revenue streams. The vision is to leverage our ARGUS cloud platform for data collection and integration in a secure environment, through which we would aggregate ARGUS data from multiple organizations, combine it with third-party data through partnerships, and return data back through unique ARGUS workflows that enhance client value, while expanding the use of ARGUS across organizations and providing us with new revenue streams.

### Property Tax

Our global Property Tax practice continues to represent an attractive growth area, driven both by solid market fundamentals and our strong competitive position. Our global reach with national scale and regional expertise, plus comprehensive databases on key CRE markets and expert knowledge combine to make us a leader in the industry. Our objective is to continue growing our market share and scale our Property Tax business into a leading, independent global property tax advisory practice that leverages technology and data.

Key priorities for 2020 include:

- Continued organic growth in our core markets driven by increased market share, operational productivity, and higher value contingency contracts;
- Focusing on market expansion in key U.S. and U.K. markets by pursuing organic growth initiatives and financially accretive acquisitions when opportunities arise; and
- Driving digital transformation with technology and data to enhance client value while improving internal efficiencies, modernizing our service delivery and data-enabling business development.

While our Canadian, U.S. and U.K. Property Tax operations all share the same competitive advantages, each national business has established unique strengths and specialties. Over the long term, we plan to leverage the strengths of each national model across all geographies to become a leading property tax advisor globally to the largest CRE owners as well as the mid-market, and to efficiently leverage specialty in our target asset classes.

## Recent Developments in our Business

We have completed a number of acquisitions and financing transactions in the last three years, including those listed below.

### *Acquisitions*

The key characteristics of our acquisitions over the past three years are summarized in the following table:

Entity	Key Characteristics
Axiom Cost Consulting Inc. (2017)	Expanded our Cost practice market share in Western Canada
Estate Master Group Holdings Pty Limited (2017)	Expanded our market share and strengthened our Altus Analytics product offerings
CVS (Commercial Valuers & Surveyors) Limited (2017)	Doubled the size of our Property Tax services in the U.K. based on volume of appeals filed
New Market Real Estate Group, LLC (2018)	Strengthened our Altus Analytics Appraisal Management practice in Northeastern U.S.
Aspect Property Consultants LLP (2018)	Strengthened our Property Tax services in the U.K. with added expertise in the industrial / warehouse markets
Taliance Group SAS (2018)	Strengthened our Altus Analytics offering with a new cloud software solution and expanded our position in Europe
One11 Advisors, LLC (2019)	Strengthened our Altus Analytics software services and managed services offerings
Caruthers & Associates, Inc. (2019)	Expanded our Property Tax services and geographic footprint in the U.S.

### **2017**

#### *Altus Analytics New Product Launches and Upgrades*

In the first quarter of 2017, we launched AE 11.6 (“AE 11.6”), an upgraded version of our industry-leading CRE and investment management platform. Enhancements in AE 11.6 included improved user experience (simplified for key transaction and valuation roles), advanced user productivity features, and more powerful reporting capabilities.

In the second quarter of 2017, we launched ARGUS Developer 7.7, an upgraded version of our industry leading software that models, forecasts, manages, analyzes and reports on development project costs and

cash flows. Enhancements included increased language functionality through the addition of German and Spanish languages, as well as other user improvements.

#### ***Strategic Investment in Waypoint Building Group***

Consistent with our strategy of building and scaling our technology and data offerings through partnerships and direct investments, on March 17, 2017, we advanced USD3.0 million to Waypoint Building Group, Inc. (“Waypoint”) in the form of a promissory note, with simple interest accrued at a rate of 5% and payable on maturity, 24 months from the date of issuance. The promissory note includes conversion features which are applicable on maturity or upon the occurrence of certain events such as an equity financing or corporate transaction.

Waypoint is an early-stage data analytics company. Founded in 2009, Waypoint is a San Francisco-based CRE technology company that provides real-time local market operating expense information and benchmarking solutions to the North American CRE market.

#### ***Early Redemption of Outstanding 6.75% Convertible Debentures***

The outstanding 6.75% convertible debentures (“2012 convertible debentures”) were redeemed by the Company on May 3, 2017, in accordance with the terms of the convertible debenture indenture and have been delisted from the Toronto Stock Exchange. The aggregate principal amount of the 2012 convertible debentures outstanding as of December 31, 2016 was \$6.1 million, of which \$5.7 million was converted into 570,900 common shares issued from treasury at a conversion price of \$10.00 per common share. The remaining principal amount of \$0.4 million of the 2012 convertible debentures was redeemed using available cash on hand.

#### ***Investment in Real Matters***

On May 11, 2017, Real Matters Inc. (“Real Matters”) completed its initial public offering at \$13.00 per common share. As a result, our equity interest in Real Matters was diluted to 12.0%. The partial deemed disposition of our investment and re-measurement of our retained interest resulted in an accounting gain of \$115.7 million in the second quarter. At that time, the ongoing accounting treatment of our investment in Real Matters changed from equity accounting to an available-for-sale investment. Since then, gains or losses from mark-to-market adjustments were reflected directly in other comprehensive income (loss). Certain items such as dividends and impairment losses were recognized in profit or loss. When our investment was derecognized as a result of a sale or impairment, the cumulative gain or loss previously recognized in other comprehensive income (loss) was reclassified to profit or loss.

#### ***Restructuring Activities***

In the first quarter of 2017, we undertook company-wide restructuring activities under a corporate program to further optimize operations. This restructuring plan was completed in Q2 of 2017. In connection with these restructuring activities, a total of \$4.7 million in restructuring costs was recorded for the year ended December 31, 2017. These charges related primarily to employee severance costs.

### **2018**

#### ***Restructuring Activities***

In Q1 of 2018, we undertook and completed restructuring activities in Geomatics to reduce costs. In connection with these restructuring activities, a total of \$2.9 million in restructuring costs was recorded in 2018. These charges related primarily to employee severance costs and onerous leases.

In Q2 of 2018, we initiated restructuring activities in our Property Tax practice as a result of our integration efforts in the U.K. following the acquisition of CVS. This was completed in Q4 of 2018. In connection with these restructuring activities, a total of \$3.6 million in restructuring costs was recorded in 2018. These charges related primarily to employee severance costs and onerous leases.

#### ***Sale of Investment in Real Matters***

In September 2018, we sold our shares related to our investment in Real Matters for net proceeds of \$54.2 million. The loss included in other comprehensive income (loss) up to the date of disposition of \$70.8 million was transferred to retained earnings. In October 2018, the proceeds were used to reduce the borrowings under the Credit Facilities.

### **2019**

#### ***Altus Analytics Transition to Subscription Model***

Starting in July 2019, we started to sell AE only on subscription terms to new customers (primarily on the cloud platform), while continuing to offer existing clients the option to license the software either on subscription terms (on the cloud or on-premise) or on on-premise perpetual terms until the end of the year. The introduction of the new revenue and pricing model supports our strategy to migrate our current on-premise customers who are currently on maintenance contracts to cloud subscription contracts. As of the start of 2020, all of our Altus Analytics software products are being sold only on a subscription-based model.

#### ***ARGUS Enterprise Made Available on the Cloud***

In July 2019, we launched AE 12, a new version of AE powered by ARGUS Cloud. AE 12 builds on the strength of our industry leading CRE valuation capabilities and now includes cloud-only deployment and multi-instance support of AE, new benchmarking and dashboard functionality, enhanced workflows through integration with ARGUS Taliance and ARGUS Voyanta, and support for German and French market valuations.

#### ***Subsequent Events***

##### ***Geomatics Spin-Off***

On January 21, 2020, we agreed, subject to definitive documentation, to combine our Geomatics business segment with WSP Global Inc.'s respective geomatics focused business unit. The combined entity will be a leading geomatics firm in Canada, and comprise approximately 750 employees in offices in Western Canada and Ontario. The transaction, which is subject to finalization of definitive documentation, is expected to close in the second quarter of 2020 and will be reflected as discontinued operations starting in the first quarter of 2020.

##### ***Altus Data Studio Launch***

On February 19, 2020 we announced the launch of Altus Data Studio for our Canadian clients, which combined our legacy RealNet and Altus InSite products into one core platform with significant enhancements to the user experience and introduction of robust data visualization capabilities for our comprehensive coverage on the Canadian residential, office, industrial and CRE investment markets.

##### ***Amendment to Credit Facilities***

Effective March 24, 2020, subject to the satisfaction of customary closing conditions, we amended and expanded our Credit Facilities to further strengthen our financial position and to support our growth strategy. The amended Credit Facility increases Altus Group's borrowing capacity to C\$275 million from C\$200 million, extends the term by three years (with an additional two year extension option), and includes

other improvements including lowered bank margins and greater flexibility in borrowing terms. The new Credit Facility is unsecured.

#### 4. BUSINESS OF ALTUS GROUP

##### Overview

Altus Group is a leading provider of software, data solutions and independent advisory services to the global CRE industry. Our businesses, Altus Analytics and Altus Expert Services, reflect decades of experience, a range of expertise, and technology-enabled capabilities. Our solutions empower clients to analyze, gain insight and recognize value on their real estate investments. Headquartered in Canada, we have approximately 2,500 employees around the world, with operations in North America, Europe and Asia Pacific. Our clients include many of the world's largest CRE industry participants. Altus Group pays a quarterly dividend of \$0.15 per share and our shares are traded on the TSX under the symbol AIF.

We have three reporting business segments - Altus Analytics, Commercial Real Estate Consulting ("CRE Consulting") and Geomatics.

##### Geographic Coverage

##### *Revenue Contribution by Geography*

Altus Group's revenue is geographically disbursed as follows:

	Year Ended December 31, 2019 (\$,000)	Year Ended December 31, 2018 (\$,000)
Canada	223,211	210,213
U.S.	207,152	180,970
Europe	105,024	86,700
Asia Pacific	32,028	32,546
<b>Total</b>	<b>567,415</b>	<b>510,429</b>

##### *Altus Analytics*

Our Altus Analytics segment consists of revenues from software sold under the ARGUS brand and from data solutions that are made available to clients through our Appraisal Management solutions, as well as through data subscription products. Altus Analytics clients predominately consist of CRE asset and investment management firms, including large owners, managers and investors of CRE assets and CRE funds, as well as other CRE industry participants including service providers, brokers, and developers.

Our ARGUS software solutions are among the most recognized in the CRE industry and are sold globally. Our product stack for global CRE asset and investment management comprises end-to-end integrated software solutions on our cloud platform that provide visibility at the asset, portfolio and fund level to help clients enhance performance of their CRE investments. Our flagship AE software is the leading global solution for CRE valuation and portfolio management and is widely recognized as the industry property valuation standard in key CRE markets. AE's suite of functionality enables property valuation and cash flow analysis, property budgeting and strategic planning, investment and fund structure forecasting,

dynamic reporting capabilities, and scenario sensitivity and risk analysis. As of the third quarter of 2019, we offer AE on a cloud platform while continuing to support the on-premise software. The cloud platform leverages the AE calculation engine and provides clients with cloud-based infrastructure; new analytics capabilities (such as benchmarking functionality); integrations with other ARGUS products, storage, access and back-up of AE files; and access to new ARGUS applications (such as ARGUS Acquire, a deal management solution for CRE acquisitions; and ARGUS API, an application programming interface). Other ARGUS products include ARGUS Taliance (cloud-based fund solutions for alternative investment firms), ARGUS Voyanta (a cloud-based data management solution), and ARGUS Developer and ARGUS EstateMaster (software for development feasibility analysis). In addition to standard technology services related to education, training and implementation, we also offer advisory and managed services for real estate organizations' front-to-back-office strategies, processes and technology.

Fueled by our ARGUS software solutions, we provide information services on a global basis through our Appraisal Management platform and data subscription products. Our global Appraisal Management solutions combine data and analytics functionality with a managed service delivery to enable institutional real estate investors to perform quarterly performance reviews, benchmarking and attribution analysis of their portfolios. Through this offering we provide an end-to-end valuation management solution for our institutional clients, providing independent oversight and expertise while leveraging our data analytics platform. We primarily offer Appraisal Management solutions in the U.S., and we are expanding into Europe and Asia Pacific. Our Appraisal Management clients primarily consist of open and closed real estate funds, including large pension funds. Altus Analytics also includes a Canadian data subscription product, Altus Data Studio, which provides comprehensive real estate information on the Canadian residential, office, industrial and investment markets with unique data visualization capabilities. Our Canadian data covers new homes, investment transactions and commercial market inventory in key markets, and provides intelligence on the national housing market and consumer home buying and borrowing patterns.

Prior to 2020, the majority of our customers had licensed our AE software products on an on-premise basis, and had either paid on perpetual terms with ongoing maintenance, or on subscription terms. As of the start of 2020, all of our Altus Analytics software products are now being sold only on a subscription-based model. Our software subscription agreements vary in length between one to five years, and the subscription fee primarily depends on the number of users and the applications deployed. We enjoy industry leading retention rates for our AE software maintenance revenues (97% in 2019), calculated as a percentage of maintenance revenue retained upon renewal. In addition to software subscriptions, our software services are charged primarily on a time and materials basis, billed and recognized monthly as delivered. The contractual terms of our Appraisal Management agreements are generally for three years and pricing is primarily based on the number of real estate assets on our platform, adjusted for frequency of valuations and complexity; we enjoy very high contract renewal rates. Our Appraisal Management teams are also engaged from time to time to perform due diligence assignments in connection with CRE transactions.

In 2019, over 70% of Altus Analytics' revenues were comprised of over time recurring revenues, which are targeted to represent upwards of 90% of total revenues by 2021. Recurring revenues represent revenues related to software and data subscriptions where the contract value is recognized ratably over the contract term, maintenance for perpetual licenses, and Appraisal Management contracts that depend on our data analytics tools. Consistent with recurring revenues disclosed in prior years, this depicts the economic value of our renewable contracts.

Altus Analytics operates in Canada, the U.S., Europe and Asia Pacific.

### *Commercial Real Estate Consulting*

Our CRE Consulting segment consists of the Property Tax, and the Valuation and Cost Advisory business units. Through our various practice areas, we are well-equipped to serve clients with an end-to-end solution that spans the life cycle of CRE assets - from feasibility, development, acquisition, management and disposition. Our professionals possess extensive industry, market and asset-specific knowledge that contribute to our proprietary internal data systems. We have long-standing relationships with leading CRE market participants - including owner operators, developers, financial institutions, and various CRE asset holders and investors.

Our largest revenue contributor to CRE Consulting is our Property Tax business which operates in Canada, the U.S. and the U.K. Our team of Property Tax professionals help clients minimize the tax burden and reduce the cost of compliance. Our core real estate property tax services include assessment reviews, management and appeals, as well as in the U.S., personal property and state and local tax advisory services. The majority of our Property Tax revenues are derived on a contingency basis, representing a percentage of the savings we achieve for our clients. As such, we recognize contingency revenues when settlements are made, which in some cases could span multiple years. A smaller portion of our fees are based on time and materials basis. Valuation services, which are predominantly provided in Canada, consist of appraisals of real estate portfolios, valuation of properties for transactional purposes, due diligence and litigation and economic consulting. Our Cost Advisory practice, offered in both the private and public sectors in North America and Asia Pacific, provides expert services in the areas of construction feasibility studies, budgeting, cost and loan monitoring and project management. Pricing for our Valuation and Cost Advisory services is primarily based on a fixed fee or time and materials basis. Given the strength of our brand, our independence and quality of our work, we enjoy a high rate of client renewals across all of our CRE Consulting businesses.

CRE Consulting operates in Canada, the U.S., the U.K. and Asia Pacific.

### *Geomatics*

Our Geomatics business operates primarily in Western Canada, with a significant number of clients in the oil and gas exploration and development sector. Geomatics is the practice of recording and managing spatially referenced information, including land surveying, geographic information systems, global positioning systems and light detection and ranging. Our Geomatics services, performed by highly qualified certified professionals, include land surveys and mapping for setting of property boundaries, route and corridor selection, land settlement, construction developments, and oil field and well-sites. Our competitive advantages include the depth of our team's experience and specialized training, our strong track record of safety, the timeliness and quality of our work, and our geographic strength in Western Canada. Our Geomatics services are primarily charged on a time and materials fee basis.

Geomatics operates in Canada.

Please refer to page 8 for recent disclosure regarding an upcoming transaction for this business unit.

### *Revenue Contribution by Segment*

Set out below is a comparison of Altus Group's revenue, as reported by operational segment:

	Year Ended December 31, 2019 (\$,000)	Year Ended December 31, 2018 (\$,000)
Altus Analytics	201,951	183,428
Commercial Real Estate Consulting:		
Property Tax	213,483	176,734
Valuation and Cost Advisory	110,649	107,214
Geomatics	41,698	43,632
Eliminations	(366)	(579)
<b>Total</b>	<b>567,415</b>	<b>510,429</b>

### **Competitive Conditions**

#### *Competitive Strengths*

Altus Group is one of the world's leading providers of software, data solutions and independent advisory services to the global CRE industry. Our key competitive strengths in the marketplace are comprised of our independence, our industry expertise, the breadth and diversity of our offerings, our differentiated data and software solutions, and our growing global scale. Together they provide us with a competitive advantage that allows us to meet a diverse range of our clients' needs as a single provider. They have also allowed us to gain significant market share in our core markets, and have contributed to strong and long-standing client relationships across all of our business units. These capabilities are particularly important for larger clients, such as banks, pension funds, property development companies, insurance companies and public real estate investors. The strategic combination of our CRE practice areas also allows us to service clients through the entire life cycle of their real estate holdings, from feasibility, to acquisition or the development of a project, to construction, to operations and portfolio management, and eventually, asset disposition.

Combining our data and technology offerings under one organization has positioned us to serve global enterprise clients who require multiple solutions and professional services to address the complex needs of their CRE portfolios. We believe that the ability to provide common reporting and consistency on a global portfolio basis will continue to attract new clients. Additionally, the diversity of our offerings allows us to mitigate market volatility downturns with better resilience.

#### *Industry, Market and Asset-Specific Knowledge*

We possess extensive industry, market and asset-specific knowledge and information databases in the markets in which we operate. With approximately 2,500 employees worldwide, we have a critical mass of professionals that allows for increased specialization within our practice areas. The knowledge we have amassed has positioned us to provide expert advice, and provide software and data solutions tailored to our clients' needs. In addition, having advised and compiled information on many of the most significant properties in various urban centres, we have an extensive database of these properties and are often retained to provide a variety of services over their life-cycle.

## Competition

Altus Group faces competition from five main sources:

- *Software providers* - although our software offerings are industry-standards in North America, we still face competition from other software providers primarily in real estate asset management, valuation, budgeting, forecasting, reporting and lease management solutions.
- *Local or regional firms offering professional real estate or land-based services* - these firms tend to be smaller in size than our Company and compete on projects where the real property is geographically proximate.
- *Real Property Brokerages* - although many leading brokerages are clients of our Altus Analytics offerings, these firms have a national and international base and also compete with us for larger clients with multi-jurisdictional and multi-service professional real estate service needs, primarily in the areas of valuations, due diligence, and some property tax assessments.
- *Accounting, law, specialty and engineering firms* - these firms have national and international bases and compete with us for larger clients with multi-jurisdictional and multi-service professional real estate service requirements.
- *Data providers* - although our data solutions and subscription products are unique in the industry, other data providers target similar customers and overall, there has been a rise in new data products introduced to the market from other CRE firms and start-ups.

## Employees

One of our key competitive advantages is our industry expertise. As such, our employees are our most valuable asset. In order to deliver on our clients' needs and provide the level of service our clients expect, we are dependent on being able to attract, retain and motivate qualified individuals. We have been successful in attracting and retaining talented professional staff due to, among other things, our global scale and position as an industry leader. This gives us the ability to offer our employees the opportunity to develop a broad and unique skill set through participation in a variety of projects, practice areas and high-profile assignments.

Our ability to draw on employees with a wide range of academic and professional backgrounds is critical to our success. Our employees have professional backgrounds in business, CRE and technology, with specific skills sets ranging from appraisal and valuations, business administration, software sales, engineering, legal, accounting, land surveying, quantity surveying, economics, software development, forestry and land-use. We have been successful in attracting and retaining talented professional staff due to, among other things, our global scale and position as an industry leader. This gives us the ability to offer our employees the opportunity to develop a broad and unique skill set through participation in a variety of projects, practice areas and high-profile assignments.

Our dependence on being able to attract and retain employees is also one of our material risks. We strive to mitigate this risk by providing competitive benefits and compensation packages. We regularly benchmark our practices to those of our peers to ensure our benefits remain competitive and continue to meet our employees' needs. At our most senior levels, not only do we offer participation in our Long-Term Incentive Plan, but we also award a portion of our annual bonus in the form of equity. We offer flexible working arrangements that help improve our employees' work-life balance and overall wellness, and we provide a wide array of training, including technical, leadership and personal development aimed at empowering our employees to advance their careers within our company.

We regularly review our talent and succession pipeline, giving visibility of our top talent to our executive team across the business. We inform our Board regularly with regards to our key talent and ensure the Board has direct exposure to these individuals.

### ***Regulations***

The professional associations to which our employees belong regulate membership, set professional standards and provide oversight. They have the authority to censure or expel members who do not abide by their codes of conduct.

Altus Group is also globally regulated by the Royal Institution of Chartered Surveyors (“RICS”), the world’s leading qualification for professional standards in land, property and construction. RICS is the global professional body that promotes and enforces the highest international standards in the valuation, management and development of land, real estate, construction and infrastructure.

To our best knowledge, we remain the only Canadian publicly-traded company regulated by RICS. Among other things, RICS requires us to adhere to certain valuation standards that take into account sustainability factors, such as environment and climate change, health and well-being and corporate responsibility. With our commitment to regulation by RICS, we align our self with RICS’ recognition of the growing relevance of sustainability factors as a market influence.

### **Intangible Property**

#### ***Trademarks***

We believe that the trademarks Altus®, Altus Group® and Altus Analytics® enjoy significant brand recognition within the CRE industry.

We also believe that the trademark ARGUS® and its family of software product names and/or related trademarks also enjoy significant brand recognition within the CRE industry. ARGUS is recognized as an industry standard in providing software solutions for managing and growing a CRE portfolio.

We believe that the trademarks RealNet® and Altus InSite® and their data subscription products enjoy significant brand recognition within the Canadian CRE industry.

#### ***Proprietary Software and Data Analytics Solutions***

Altus Group’s proprietary software and data analytics solutions, including our ARGUS branded products, Appraisal Management platform and data subscription products, are critical components of our success and a key differentiator in the marketplace. We have developed and acquired software solutions customized to our practice areas. We have taken a proactive approach to identify areas where we can improve our technology in order to better serve our clients. Clients increasingly rely on information technology to manage complex real property portfolios and property development and that responds more quickly to informational needs. We protect our technology and data offerings through a combination of copyright, trade secrets, confidentiality procedures and contractual arrangements.

#### ***Technology, Data, and Channel Partnerships***

From time to time, we enter into technology, data, and channel partnerships with other companies to drive the sales and adoption of our technologies and solutions worldwide. Our technology and data partnerships are often intended to enable interoperability between other systems and data sources commonly used by our customers.

In addition to our established software and data analytics offerings, our Property Tax practice relies on its information systems in Canada, the U.S. and the U.K. to manage property tax appeal processes. Our Property Tax practice uses these systems to make an assessment of the property tax applicable to a particular property or portfolio of properties.

## **Environmental, Social and Governance**

As a leading global provider of software and IT professional services to the CRE market, we encounter and manage a broad range of environmental, social and governance (“ESG”) issues. We have identified the following ESG priorities, by category, as being relevant to our business and of interest to our key stakeholders.

### ***Environmental***

We are committed to protecting the environment and reducing waste by promoting the efficient use of energy and natural resources. We strive to implement recycling programs wherever it is available in our offices, including reducing use of bottled water by installing drinking water filtrations systems, installing energy efficient lighting in many of our offices, and encouraging employees to save paper and only print documents when necessary. When possible, we strive to reduce our carbon footprint by reducing air travel.

Our head office in Toronto is also LEED certified, and as we expand our geographical presence we strive to choose offices that have similar environmental certifications.

### ***Social***

Because a global, skilled workforce is a key contributor to our business, the ability to attract and retain employees is one of our material risks. The Human Resources and Compensation Committee has oversight over social issues that support our strategic goal of being a top employer relative to its peers. The Audit Committee is responsible for oversight over our Code of Business Conduct and Ethics.

### **Promote a diverse and inclusive culture**

As a global organization, the ability to draw on a wide range of viewpoints, backgrounds, skills, and experience is critical to the Company’s success. Our Board and senior leadership team dedicates considerable time and resources to promoting a diverse and inclusive workplace. Diversity and inclusion are integral to Altus Group being successful and a key facet to building an efficient team of senior leaders.

In our Code of Business Conduct and Ethics, we commit to actions and policies designed to assure fair employment, including equal treatment in the hiring, promoting, training, compensation, termination and corrective action of employees, and do not tolerate discrimination. This is reinforced in the Company’s workplace communications and our policies and procedures, including Workplace Anti-Violence and Unlawful Discrimination and Bullying Policy, our Employee Handbooks and our Modern Slavery Act Policy. It is further supported by our confidential, externally-administered Compliance Hotline that employees, consultants and other persons in a similar relationship with the Company can access.

The Company promotes a diverse and inclusive environment within the organization on many fronts, including unconscious bias, diversity and inclusivity training which has been rolled out globally. Highlights of our diversity and inclusion programs and initiatives in 2019 include:

- a Diversity and Inclusion Charter
- a Diversity and Inclusion Committee in North America
- unconscious bias, diversity and inclusivity training, and
- active involvement with the CRE Women's (CREW) Network, which is dedicated to transforming the CRE industry by advancing women globally.

We track the number and percentage of women in senior leadership roles and we are focused on developing this talent "pipeline". Currently, approximately 40% of our global workforce is female. 15% of our current executives, and 19% of our senior leadership, is comprised of women.

#### Attract and retain a global, skilled workforce

Initiatives designed to help the Company in the recruitment and retention of the best talent include:

- a formal university recruitment program launched by the Company in Canada in 2019 (with the goal of expanding the program into other countries where we do business);
- competitive benefits and compensation packages, benchmarked against our peers, and annual performance incentives;
- flexible working arrangements that help improve our employees' work-life balance and overall wellness, a wide array of training, including technical, leadership and personal development aimed at empowering our employees to advance their careers within our company.
- at the most senior levels, the ability to own equity of the Company through participation in our Long-Term Incentive Plan. At the end of 2019, we estimated that approximately 4% of our outstanding shares were held by employees.

In 2019 we held a number of courses globally focused on training over 270 employees to equip them to successfully transition from a team member to a team leader. The courses addressed numerous "leadership foundation" topics, such as communication and feedback, managing conflict, coaching for performance and smart interviewing.

#### Improve Employee Well-Being

Our initiatives to improve employee include social policies designed to assure fair employment and a safe and non-discriminatory workplace culture, which are reinforced by our Code of Business Ethics and Conduct, and mandatory training on health and safety policies, including on compliance with our Code of Business Ethics and Conduct.

#### ***Governance***

The Audit Committee is responsible for oversight over financial and legal compliance risk management including compliance with our Code of Business Conduct and Ethics and the adequacy of our insurance coverage. The Corporate Governance and Nominating Committee is responsible for oversight of those governance issues relating to intellectual property and information security, including cyber security.

### Drive a culture of high ethical behavior and compliance

Our Code of Business Conduct and Ethics, which applies to all directors, officers, employees and consultants of the Company and its subsidiaries and affiliates, reinforces that Altus Group has strict obligations regarding ethical business conduct including with respect to legal compliance, conflicts of interest, anti-bribery and corruption and fair dealing with third parties, confidential proprietary information, trade secrets and proper use of corporate assets, and workplace behaviors.

The Code is supported by our confidential, externally-administered Compliance Hotline that employees, consultants and other persons in a similar relationship with the Company can access. The Code may be found on our website at [www.altusgroup.com](http://www.altusgroup.com).

### Protect our intellectual property and defend against claims of intellectual property rights by third parties

Protecting and enforcing our intellectual property rights including copyrights, trademarks, trade secrets, databases and methodologies is critical to maintaining our competitive position. Additionally, we may be subject to claims by third parties regarding technology infringement. The Company has dedicated IP in-house lawyers who work closely with external counsel when required to manage the protection of our trade names and trademarks and other intellectual property, and to litigate disputes with third parties when necessary. Our Code of Business Conduct and Ethics reinforces that our employees have strict obligations regarding confidential proprietary information and trade secrets.

### Securely process, maintain and transmit sensitive data that we have or collect from third parties

In the ordinary course of our business, we collect, store, process and/or transmit sensitive data belonging to clients, partners, vendors, employees and contractors as well as our own proprietary business information and intellectual property. The secure processing, maintenance and transmission of this information is critical to our workflow operations and delivery of products and services to our clients.

Highlights of our cyber and information security program include:

- leadership and oversight, management processes and technology, and
- operational functions including training, systems development, access right, suppliers, cryptography, protection against malware and patching.

We have implemented an Information Security Policy and standards and framework, controls, practices, processes and technologies in an information security management system (“ISMS”) based on the ISO/IEC 27001:2013 international standard, which helps us to identify and address gaps in our program to mitigate risk.

Following industry best practices, our cyber and security controls are applied using a risk-based approach, following the principles of defense in depth and least privileged.

## 5. RISK FACTORS

The risks and uncertainties that could significantly affect our financial condition and future results of operations are summarized below.

### *General state of the economy*

The businesses we operate are affected by general economic conditions, including international, national, regional and local economic conditions, all of which are outside of our control. Economic slowdowns or downturns, adverse economic conditions, cyclical trends, increases in interest rates, variations in currency exchange rates, reduced client spending and other factors could have a material adverse effect on our business, financial condition and results of operations. Although our operations are functionally and geographically diversified with a high degree of revenue stability protected from CRE market cyclicality, significant erosion in levels of activity in any segment in which we operate could have a negative impact on our business, financial condition and results of operations.

### *COVID-19 (Coronavirus)*

In March 2020, the World Health Organization declared COVID-19 (coronavirus) a global pandemic. The continued spread of this contagious disease outbreak and related public health developments have adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn and to legislative and regulatory changes that may impact our business and operations. At this time, the duration and magnitude of the impact of the outbreak and its potential adverse effects on our business or results of operations are uncertain and will depend on future developments.

As disclosed in “Subsequent Events” at page 8, we agreed with WSP Global Inc. to combine our respective geomatics business units. As a result of the COVID-19 global pandemic, completion of the contemplated transaction may be delayed beyond the second quarter of 2020.

### *Currency*

Our reporting currency is the Canadian dollar.

We have operations in Canada, the U.S., the U.K., Australia and various countries throughout Asia. Our exposure to foreign currency risk is primarily in the following areas:

- Profit (loss) generated by operations in foreign countries, which are translated into Canadian dollars using the average exchange rate;
- Net assets of foreign subsidiaries, which are translated into Canadian dollars using the period end exchange rate with any gains or losses recorded under accumulated other comprehensive income (loss) within shareholders’ equity; and
- Non-Canadian dollar denominated monetary assets and liabilities, which are translated into Canadian dollars using the period end exchange rate with any gains or losses recorded through profit (loss).

The exchange rate between the Canadian dollar and the U.S. dollar ranged from \$1.3630 at December 31, 2018 to \$1.3016 at December 31, 2019. The exchange rate between the Canadian dollar and the British pound ranged from \$1.7357 at December 31, 2018 to \$1.7161 at December 31, 2019. The exchange rate between the Canadian dollar and the Australian dollar ranged from \$0.9613 at December 31, 2018 to \$0.9128 at December 31, 2019.

### *Financial performance*

Our ability to achieve revenue growth and sustain profitability in future periods depends on our ability to execute our strategic plan and effectively manage our growth. A failure to do so could have a material adverse effect on our business, financial condition and results of operations. Also, our revenue, cash flow, operating results and profitability may experience fluctuations from quarter to quarter, based on project terms and conditions for billing and rendering of services.

### ***Financial targets***

Our long range financial targets are predicated on certain assumptions, including revenue growth and operating margin improvement expectations, that we may fail to achieve, which could reduce our expected earnings and cause us to fail to meet the expectations of analysts and investors and cause the price of our securities to decline.

### ***CRE market***

Although we are broadly diversified, geographically and by business offering with a high degree of revenue stability protected from CRE market cyclicality, the businesses we operate are affected by the state of CRE as an investment asset class. Prolonged economic slowdowns triggered by credit liquidity, interest rates, regulatory policy, tax policy, etc., could negatively impact the market and result in fewer CRE Consulting service engagements and software sales. This could have a material adverse effect on our business, financial condition, liquidity and results of operations.

### ***Industry competition***

We face competition from other service, software and data analytics providers. Competition for our professional services includes a broad mix of competitors, ranging from smaller, locally-based professional service firms to national, multi-regional professional service providers and to large engineering, accounting and law firms. Software providers also compete with us in real estate asset management, valuation, budgeting, forecasting, reporting and lease management solutions. There are also new companies entering the market with competitive data analytics solutions. These competitive forces could result in a material adverse effect on our business, financial condition and results of operations by reducing our relative share in the markets we serve.

### ***Acquisitions***

We intend to make acquisitions as part of our strategy to grow our business. Acquisitions may increase the size of our operations, as well as increase the amount of indebtedness that we may have to service. The successful integration and management of acquired businesses involve numerous risks and there is no assurance that we will be able to successfully integrate our acquisitions. Such failure could adversely affect our business, financial condition and results of operations.

### ***Cloud subscriptions transition***

We are transitioning our Altus Analytics business to a higher mix of recurring revenues by moving our on-premise customers to the cloud and offering all of our software solutions on over time subscription contracts, compared to our historic reliance on perpetual term contracts for on-premise software. As of July 2019, the majority of our subscription contracts to new customers will be recognized ratably over the term of the subscription while under an on-premise perpetual license, revenue is generally recognized upon purchase, and for customers who still deploy the software on-premise but on a subscription contract, we will continue to recognize a high portion of the transaction upfront. This has adversely affected, and may continue to adversely affect, our revenue and earnings in the transition period and contribute to quarterly variability, while making predicting our revenue and earnings more difficult during the transition. Additionally, our ability to move our customers to a cloud environment may take longer than we anticipate, or if customers do not adopt cloud licenses in the timeframe that we expect, our revenues and earnings may not achieve expected levels.

### ***Software renewals***

Although our software solutions are designed to increase the number of customers that purchase our solutions as subscriptions and create a recurring revenue stream that increases and is more predictable over time, our customers are not required to renew their subscriptions for our solutions and they may elect not to renew when or as we expect. Customer renewal rates may decline or fluctuate due to a number of factors, including offering pricing, competitive offerings, customer satisfaction, and reductions in customer spending levels or customer activity due to economic downturns, the adverse impact of import tariffs, or other market uncertainty. If our customers do not renew their subscriptions when or as we expect, or if they renew on less favorable terms, our revenues and earnings may be adversely impacted.

### ***Professional talent***

Our success and ability to grow are dependent on the expertise, experience and efforts of our professionals, and our ability to attract and retain qualified professionals. Competition for employees with the qualifications we desire, particularly with CRE and CRE technology experience, is intense and puts upward pressure on compensation costs. We expect that competition for qualified professionals will continue to increase, thereby causing compensation costs to escalate. Should we be unable to attract and retain professionals that meet the desired level of skills and ability, our business may be jeopardized.

### ***Third party information***

The quality of our databases supporting certain of our products and service engagements depends substantially on information provided by a number of sources, including CRE brokers, agents and property owners, trade associations, tax assessors, deed recorders, municipal planners, corporate web sites, the business and trade press, and selected third party vendors of business information. If we are unable to collect information from a significant number of these sources this could negatively affect certain of our products and may potentially result in subscriber cancellations and failure to acquire new subscribers.

### ***Enterprise transactions***

The ability to meet revenue targets for our Altus Analytics business is becoming more dependent on large enterprise transactions which have longer and less predictable sales cycles. The presence or absence of one or more of these transactions may have a material positive or negative effect on anticipated revenue in any given period.

### ***New product introductions***

As new products are developed and introduced to the marketplace, client adoption may not achieve anticipated levels. As a result, revenue expectations may not be achieved. If cash flows from new products do not reach sufficient levels, asset impairments may need to be taken on any capitalized costs related to the development of the products.

### ***Technological change***

Our ability to generate future revenues from software is dependent upon meeting the changing needs of the CRE market and evolving industry standards through new product introductions and product enhancements that respond to the technological change of our clients and the CRE industry. In order to maintain or enhance product market share over the long-term, it is imperative to anticipate and develop products that meet client and industry needs. In the short to medium term, the ability to complete product developments on a timely basis is important to achieving revenue and cost targets.

### ***Intellectual property***

We rely on protecting our intellectual property rights including copyrights, trademarks, trade secrets, databases and methodologies, which have been important factors in maintaining our competitive position. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to obtain and use information that we regard as proprietary. There can be no assurance that we will be successful in protecting our proprietary rights and, if we are not, our business, financial condition, liquidity and results of operations could be materially adversely affected. Additionally, we may be subject to claims by third parties regarding technology infringement. Responding to such claims could result in substantial expense and may result in damages or injunctive relief. We may also be required to indemnify customers pursuant to our indemnification obligations, enter into licensing agreements on unfavourable terms or redesign or stop selling affected products, which could materially disrupt the conduct of our business.

### ***Technology strategy***

Our business relies on the use of information technology systems to deliver expert services, data and software solutions to our clients. If we are unable to effectively implement our information technology strategies or adopt new technologies and technology-enabled processes relevant to our offerings in a timely or cost-effective manner, or if our employees fail to adopt in an effective and timely manner new technologies or technology-enabled processes, then our ability to deliver services and solutions that meet client needs or our ability to remain competitive in the market may be materially impaired.

### ***Information technology governance and security***

In the ordinary course of our business, we collect, store, process and/or transmit sensitive data belonging to clients, partners, vendors, employees and contractors as well as our own proprietary business information and intellectual property. The secure processing, maintenance and transmission of this information is critical to our workflow operations and delivery of products and services to our clients. Despite the robust security measures we've implemented, our data, systems and infrastructure may be vulnerable to cyber attacks or breached due to employee error, malfeasance or other disruptions. These security breaches could materially compromise our information, disrupt our business operations or cause us to breach our client obligations thereby exposing us to liability, reputational harm and/or significant remediation costs. A theft, loss, corruption, exposure, fraudulent use or misuse of client information whether by third parties or as a result of employee malfeasance could result in significant remediation and other costs, fines, litigation or regulatory actions against us, as well as cause reputational harm, negatively impact our competitive position and affect our financial results. We are increasingly relying on third-party data storage providers, including cloud storage solution providers, resulting in less direct control over our data and system processing. Such third parties may also be vulnerable to security breaches for which we may not be indemnified and which could cause materially adverse harm to our reputation and competitive position and affect our financial results.

### ***Product pipeline***

Our forecast is built on a pipeline of client opportunities at varying stages within the sales process. Our ability to achieve the forecast is dependent on completion of the sales cycle and client acceptance of mutually agreeable terms. Certain factors are beyond our control, including our clients' evaluation of our offerings, budgetary constraints, timing of their approval processes, etc. Our pipeline of opportunities may not close on terms and timing in line with our forecast. This may have a material positive or negative effect on anticipated revenue in any given period.

### ***Property tax appeals***

Our Property Tax practice is significantly influenced by property tax assessment regulators and their appeal settlement processes. The timing and volume of appeals processed and whether the outcomes are favourable may cause fluctuations on a quarterly and annual basis, in addition to spillover effects outside any particular valuation cycle. This may have a material positive or negative effect on anticipated revenue in any given period.

### ***Legislative and regulatory changes***

Changes to any of the laws, rules, regulations or policies affecting our business would have an impact on our business. Certain elements of our business are influenced by the regulatory environment of our clients, such as the requirement for pension fund managers to obtain property valuations on an annual basis. In addition, elements of our business, such as our Property Tax practice area, are significantly influenced by the regulatory regime and any changes thereto. Any change to laws, rules, regulations or policies may significantly and adversely affect our operations and financial performance.

### ***Fixed-price and contingency engagements***

A portion of our revenues comes from fixed-price engagements. A fixed-price engagement requires us to either perform all or a specified part of work under the engagement for a specified lump sum payment. Fixed-price engagements expose us to a number of risks not inherent in cost-plus engagements, including underestimation of costs, ambiguities in specifications, unforeseen or changed costs or difficulties, problems with new technologies, delays beyond our control, failures of subcontractors to perform and economic or other changes that may occur during the term of engagement. Increasing reliance on fixed-price engagements and/or increases in the size of such engagements would increase the exposure to this risk. Economic loss under fixed-price engagements could have a material adverse effect on our business.

We are also engaged to provide services on a contingency basis at our Property Tax business, meaning that we receive our fees only if certain results are achieved. We may experience adverse financial effects from having devoted professional and other resources to a project, which, due to a failure to meet the contingency goals, are not recouped through fees.

### ***Appraisal and appraisal management mandates***

Some clients rotate their appraisal mandates to different service providers. As a result, we may be rotated out of an appraisal engagement.

### ***Canadian multi-residential market***

A significant part of the Canadian Cost practice area's annual revenues are derived from the rental apartment and condominium sectors of the multi-residential development market. Any significant decline in the multi-unit residential development market could have a material adverse effect on our Cost practice's operating results.

### ***Customer concentration and loss of material clients***

Although we are not dependent on one or a small number of clients, certain of our business segments have significant clients. Loss of any significant client that contributes a substantial portion to that business segments' revenues could have a negative impact on our revenues and could impact our ability to attract and retain other clients.

***Interest rates***

We are exposed to fluctuations in interest rates under our borrowings. Increases in interest rates may have an adverse effect on our earnings.

***Credit***

We may be materially and adversely affected if the collectability of our trade receivables is impaired for any reason. In certain parts of Asia, it is often common business practice to pay invoices over an extended period of time and/or at the completion of the project. This practice increases the risk and likelihood of future bad debts. In addition, the risk of non-collection of trade receivables is greater in Asia Pacific compared to North American or European countries.

***Income tax matters***

In the ordinary course of business, we may be subject to audits by tax authorities. While management anticipates that our tax filing positions will be appropriate and supportable, it is possible that tax matters, including the calculation and determination of revenue, expenditures, deductions, credits and other tax attributes, taxable income and taxes payable, may be reviewed and challenged by the authorities. If such challenge were to succeed, it could have a material adverse effect on our tax position. Further, the interpretation of and changes in tax laws, whether by legislative or judicial action or decision, and the administrative policies and assessing practices of tax authorities, could materially adversely affect our tax position.

***Health and safety hazards***

Our employees are sometimes required to attend client worksites, including construction worksites in the case of both Cost and Geomatics and remote, wilderness areas in the case of Geomatics. The activities at these worksites may involve certain operating hazards that can result in personal injury and loss of life. We have implemented health and safety policies and procedures as well as provide required employee health and safety training programs. Despite these programs, there can be no assurance that our insurance will be sufficient or effective under all circumstances or against all claims or hazards to which we may be subject or that we will be able to continue to obtain adequate insurance protection. A successful claim for damage resulting from a hazard for which it is not fully insured could adversely affect our results of operations.

***Contractual obligations***

Our success depends largely on our ability to fulfill our contractual obligations and ensure client satisfaction. If we fail to properly define the scope of our work, communicate the boundaries or use of the advice and reports we provide, define the limits of our liability, satisfactorily perform our obligations, or make professional errors in the advice or services that we provide, clients could terminate projects, refuse payment for our services or take legal action for the loss or harm they suffer, thereby exposing us to legal liability, loss of professional reputation, enhanced risk of loss and/or reduced profits.

***Legal proceedings***

We are threatened from time to time with, or are named as a defendant in, or may become subject to various legal proceedings in the ordinary course of conducting our business, including lawsuits based upon professional errors and omissions. A significant judgment against us, or the imposition of a significant fine or penalty as a result of a finding that we have failed to comply with laws, regulations, contractual obligations or other arrangements or professional standards, could have a significant adverse impact on our financial performance. Should any indemnities made in our favor in respect of certain assignments fail to be respected or enforced, we may suffer material adverse financial consequences.

### *Insurance limits*

Management believes that our professional errors and omissions insurance coverage and directors' and officers' liability insurance coverage address all material insurable risks, provide coverage that is similar to that which would be maintained by a prudent operator of a similar business and are subject to deductibles, limits and exclusions, which are customary or reasonable given the cost of procuring insurance and current operating conditions. However, there can be no assurance that such insurance will continue to be offered on an economically affordable basis, that all events that could give rise to a loss or liability are insurable or that the amounts of insurance will at all times be sufficient to cover each and every loss or claim that may occur involving our assets or operations.

### *Dividend payments*

Our ability to pay dividends is dependent on our operations and assets, and is subject to various factors including our financial performance, our obligations under applicable Credit Facilities, fluctuations in our working capital, the sustainability of our margins and our capital expenditure requirements.

### *Leverage and financial covenants*

Our ability to pay dividends or make other payments or advances is subject to applicable laws and contractual restrictions contained in the instruments governing any indebtedness owed by us or our subsidiaries (including the Credit Facilities). The degree to which we are leveraged could have important consequences to our shareholders. For example, our ability to obtain additional financing for working capital, capital expenditures or acquisitions in the future may be limited; a significant portion of our cash flow from operations may be dedicated to the payment of principal and interest on our indebtedness, thereby reducing funds available for future operations; certain of our borrowings will be subject to variable rates of interests, which exposes us to the risk of increased interest rates; and we may be more vulnerable to economic downturns and be limited in our ability to withstand competitor pressures.

The Credit Facilities contain numerous financial covenants that limit the discretion of our management with respect to certain business matters. These covenants place significant restrictions on, among other things, our ability to create liens or other encumbrances, to pay dividends or make certain other payments, investments, loans and guarantees and to sell or otherwise dispose of assets and merge or consolidate with another entity. In addition, the Credit Facilities contain a number of financial covenants that require us to meet certain financial ratios and financial condition tests. Failure to comply with the obligations provided in the Credit Facilities could result in a default which, if not cured or waived, could result in the termination of dividends paid by us and accelerate the repayment of the relevant indebtedness. If repayments of indebtedness under the Credit Facilities were to be accelerated, there can be no assurance that our assets would be sufficient to repay the relevant indebtedness in full. There can be no assurance that future borrowings or equity financing will be available to us or available on acceptable terms, in an amount sufficient to fund our needs. If we are unable to obtain financing on the expiration of the Credit Facilities or are unable to obtain financing on favourable terms, our ability to pay dividends may be adversely affected.

### *Share price*

Our common shares do not necessarily trade at prices determined by reference to the underlying value of our business and cannot be predicted. The market price of the common shares may be subject to significant fluctuations in response to variations in quarterly operating results and other factors. In addition, securities markets have experienced significant price and volume fluctuations from time to time in recent years that are often unrelated or disproportionately related to the operating performance of particular issuers. These broad fluctuations may adversely affect the market price of our common shares.

### **Capital investment**

The timing and amount of capital expenditures made by us or any of our subsidiaries indirectly affects the amount of cash available for investments, debt payments or dividend payments. Dividends may be reduced, or even eliminated, at times when we deem it necessary to make significant capital or other expenditures.

### **Issuance of additional common shares**

We are authorized to issue an unlimited number of common shares for such consideration and on such terms and conditions as may be determined by the Board of Directors without shareholder approval, except as required by the TSX. An issuance such as this may dilute the interests of current shareholders.

## **6. DIVIDENDS**

The following table sets out the dividends on the Common Shares declared by the Company during 2017, 2018 and 2019.

Record Date	Total Dividends per Common Share		
	2019	2018	2017
March 31	\$0.15	\$0.15	\$0.15
June 30	\$0.15	\$0.15	\$0.15
September 30	\$0.15	\$0.15	\$0.15
December 31	\$0.15	\$0.15	\$0.15
<b>Total</b>	<b>\$0.60</b>	<b>\$0.60</b>	<b>\$0.60</b>

Altus Group pays a quarterly dividend to Shareholders as determined by the Board from time to time. Altus Group's dividend is subject to the discretion of the Board and may vary depending on, among other things, Altus Group's earnings, financial requirements, the satisfaction of certain customary covenants contained in the Credit Facilities documents, and/or the satisfaction of solvency tests imposed by the OBCA for the declaration of dividends.

Shareholders who are non-residents of Canada will be paid their dividends net of withholding taxes. Non-residents should consult their own tax advisors regarding the tax consequences of investing in Altus Group's Common Shares.

## **7. CAPITAL STRUCTURE OF ALTUS GROUP**

The authorized capital of Altus Group consists of an unlimited number of Common Shares and an unlimited number of Preferred Shares issuable in series. As at December 31, 2019, Altus Group had 40,191,464 Common Shares and no Preferred Shares issued and outstanding. The following is a summary of the rights, privileges, restrictions and conditions attaching to the Common Shares and Preferred Shares.

### **Common Shares**

Holders of Common Shares are entitled to one vote per share at meetings of Shareholders of Altus Group, to receive dividends if as and when declared by the Board and to receive a pro-rata share of the remaining

property and assets of Altus Group upon its dissolution or wind-up, subject to the rights of shares having priority over the Common Shares.

### Preferred Shares

Our Preferred Shares may be issued in one or more series with each series to consist of such number of shares and to have such rights, privileges, restrictions and conditions as determined by the Board before the issuance thereof. Holders of Preferred Shares, except as required by law, are not entitled to vote at meetings of Shareholders of Altus Group. The Preferred Shares rank ahead of the Common Shares and any other shares ranking junior to the Preferred Shares with respect to the payment of dividends and the distribution of assets in the event of the liquidation, dissolution or wind-up of Altus Group, whether voluntary or involuntary, and may also be given such other preferences over the Common Shares and any other shares ranking junior to the Preferred Shares as may be determined at the time of creation of any series of Preferred Shares.

### Information and Reports

We will furnish to Shareholders, in accordance with applicable securities laws, all our consolidated financial statements (including quarterly and annual financial statements) and other reports as required by applicable law, including prescribed forms needed for the completion of tax returns under the Tax Act and equivalent provincial legislation.

The directors and senior officers of the Company and of our subsidiaries are required to file insider reports and comply with insider trading provisions under applicable Canadian securities legislation in respect of trades made by such persons in the Company's securities.

## 8. MARKET FOR SECURITIES

The Common Shares of Altus Group are listed for trading on the TSX under the symbol AIF. The following table sets out the price range and volume traded of the Common Shares on the TSX for each month during 2019.

Month End	High (\$)	Low (\$)	Volume Traded
January 2019	25.33	21.84	1,721,400
February 2019	26.42	21.67	2,035,100
March 2019	26.96	24.85	1,301,800
April 2019	27.89	26.03	1,147,500
May 2019	30.21	26.84	1,539,300
June 2019	32.76	29.43	1,779,000
July 2019	34.42	31.82	1,676,100
August 2019	39.20	32.53	2,835,000
September 2019	40.26	37.50	1,454,200
October 2019	40.29	35.25	1,958,000
November 2019	37.49	33.18	1,821,200
December 2019	39.13	36.30	1,833,900

## 9. ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

Designation of class	Number of securities held in escrow or that are subject to a contractual restriction on transfer	Percentage of class
Common Shares	714,185	1.8%

Common Shares are held in escrow as a result of the following:

1. Typically, as a condition of the acquisition agreements we enter into, a portion of the equity consideration (Common Shares) paid to vendors is subject to certain escrow conditions for a specified period of time following closing of each acquisition transaction. These tend to be periods of three to five years, following which, assuming all conditions have been met or satisfied, the Common Shares are released to the vendor(s).
2. In 2013, Altus Group established a Restricted Share Plan in Canada as part of our annual short-term incentive award program for senior management. Under this Plan, a portion of an employee's annual incentive award is deferred in the form of restricted shares which vest in the year of the award but are held in escrow and released to the employee on the third anniversary of the award grant date.
3. In March 2017, prior to the approval of the Long-Term Incentive Plan and as part of the Equity Compensation Plan, Common Shares were issued to certain senior employees in escrow and will not be available until four years following the date of grant. At that time, these Common Shares will be released, provided, subject to certain exceptions such as retirement, disability or death, the individual is employed with the Company at the time of release. If the employee resigns from the Company or is terminated for cause, the Common Shares will be forfeited.
4. In 2019, as part of both the Equity Compensation Plan and the Long-Term Incentive Plan, Common Shares were issued to certain senior employees in escrow and will not be available until three years following the date of grant. At that time, these Common Shares will be released, provided, subject to certain exceptions such as retirement, disability or death, the individual is employed with the Company at the time of release. If the employee resigns from the Company or is terminated for cause, the Common Shares will be forfeited.
5. From time to time, we offer employees a signing bonus in the form of restricted Common Shares that are held in escrow and typically released to the employee in three years.

## 10. DIRECTORS AND OFFICERS

The following table sets out the directors and officers of Altus Group during 2019, their province and country of residence, the positions held by such directors and officers within Altus Group and the period during which they have exercised such mandate, and each of their principal and past occupations or employment during the past five years. The term of office for each of the directors of Altus Group expires at the time of the next annual meeting of Shareholders. Additional information regarding the directors of Altus Group can be found in the Company's most recent Management Information Circular, which is available on SEDAR at [www.sedar.com](http://www.sedar.com).

---

**Directors**


---

Name, Province and Country of Residence	Director Since	Principal and Previous Occupations
<b>Angela L. Brown</b> <sup>(1)(2)</sup> Florida, United States	June 2016	<b>President and Chief Executive Officer of Moneris Solutions Corporation</b> (a provider of payment processing solutions).
<b>Robert G. Courteau</b> Ontario, Canada	September 2012	<b>Chief Executive Officer of Altus Group.</b>
<b>Colin Dyer</b> <sup>(1)</sup> Washington DC, United States	May 2019	<b>Chairman of the Supervisory Board of Unibail-Rodamco-Westfield</b> (a commercial real estate company)  Global Chief Executive Officer of Jones Lang LaSalle Incorporated (a commercial real estate services firm)
<b>Carl Farrell</b> <sup>(4)(5)</sup> Ontario, Canada	June 2014	<b>President of Altus Group.</b>  Executive Vice-President & Chief Revenue Officer of SAS Institute Inc.  Executive Vice President of Americas, SAS Institute Inc.
<b>Anthony Gaffney</b> <sup>(3)</sup> Ontario, Canada	June 2012	<b>Corporate Director.</b>  Managing Partner, Board and CEO Services at Odgers Berndtson (a global executive search firm).  Chief Executive Officer of Aon Hewitt Canada (a human capital and management consulting company).
<b>Anthony Long</b> <sup>(3)</sup> Texas, United States	May 2019	<b>Co-Founder and Co-Managing Partner of CLX Ventures, LLC</b> (a real estate and private equity investment firm).  Global President of Client Care and Global President of Asset Services, CBRE Group, Inc.
<b>Diane MacDiarmid</b> <sup>(2)(3)</sup> Ontario, Canada	June 2012	<b>Chief Talent Officer of QuadReal Property Group</b> (a global real estate company).  Senior Client Partner of Korn/Ferry International (a global executive search firm).
<b>Raymond C. Mikulich</b> <sup>(2)(3)</sup> New York, United States	December 2013	<b>Corporate Director.</b>  Managing Partner of Ridgeline Capital Group, LLC (a real estate investment and consulting company).

---

---

**Directors**


---

Name, Province and Country of Residence	Director Since	Principal and Previous Occupations
<b>Eric W. Slavens</b> <sup>(1)(2)(5)</sup> Ontario, Canada	May 2005	<b>Corporate Director.</b>
<b>Janet P. Woodruff</b> <sup>(1)(3)</sup> British Columbia, Canada	May 2015	<b>Corporate Director.</b> Consultant as acting Chief Executive Officer and interim Chief Financial Officer of Transportation Investment Corporation, a B.C. Crown corporation.

---



---

**Officers (who are not directors of Altus Group)**


---

<b>Angelo Bartolini</b> Ontario, Canada	<b>Chief Financial Officer.</b>
<b>Liana L. Turrin</b> Ontario, Canada	<b>General Counsel &amp; Corporate Secretary.</b>

---

<sup>(1)</sup> Member of the Audit Committee.

<sup>(2)</sup> Member of the Corporate Governance and Nominating Committee.

<sup>(3)</sup> Member of the Human Resource and Compensation Committee.

<sup>(4)</sup> Mr. Farrell departed the Company on December 31, 2019.

<sup>(5)</sup> Mr. Slavens and Mr. Farrell retired from the Board as of December 31, 2019.

**Shareholdings of Directors and Officers**

As of December 31, 2019, our directors and officers listed above, as a group, beneficially owned or controlled or directed, directly or indirectly 212,452 Common Shares, representing approximately 0.53% of the aggregate number of voting securities of the Company issued and outstanding. The foregoing information as to the shares beneficially owned, controlled or directed, directly or indirectly by the directors and officers of Altus Group which has been provided by each of the directors and officers is not within the direct knowledge of the Company.

## 11. AUDIT COMMITTEE

**Audit Committee Charter**

Our Board has approved a written charter for the Audit Committee which sets out its purpose, authority, function, membership, qualifications and responsibilities, the text of which is set out in Schedule "A" to this AIF. Our Company's Audit Committee Charter may also be viewed on Altus Group's website at <https://www.altusgroup.com/wp-content/uploads/2020/03/Audit-Committee-Charter-2019-August-8-2019.pdf>.

## Composition of the Audit Committee

The Audit Committee was composed of the following independent directors from January 1, 2019 to May 7, 2019: Eric W. Slavens (Chair), Janet P. Woodruff and Angela L. Brown. Following May 7, 2019, the Audit Committee was composed of the following independent directors: Janet P. Woodruff (Chair), Eric W. Slavens, Angela L. Brown and Colin Dyer. Audit Committee members are appointed by the Board on an annual basis with a view to ensuring that the committee maintains an appropriate level of experience and financial literacy.

Our Board, upon the recommendation of the Corporate Governance and Nominating Committee, has determined that all members of the Company's Audit Committee are independent and financially literate within the meaning of applicable securities laws and have the following general business experience and education that is relevant to the performance of their responsibilities as Audit Committee members.

Name	Education and Experience
Janet P. Woodruff (Chair) <sup>(1)</sup>	Ms. Woodruff is Fellow of the Chartered Professional Accountants of British Columbia and a Certified Director. She has gained financial expertise through her 30 year executive career, which included positions as Chief Executive Officer and Chief Financial Officer. Ms. Woodruff has a Honors Bachelor of Science from University of Western Ontario and a Master in Business Administration from York University.
Angela L. Brown	Ms. Brown is the President and Chief Executive Officer of Moneris Solutions Corporation. Ms. Brown served as Group Executive, Enterprise Development, Merchants & Acceptance, for MasterCard Worldwide. Previously, Ms. Brown spent 13 years at the Canadian Imperial Bank of Commerce within the payments business. Ms. Brown holds a Bachelor of Arts from the University of Toronto and a Master of Business Administration from the Schulich School of Business. She is also a graduate of the Institute of Corporate Directors, Directors' Education Program, the Rotman School of Management's Financial Literacy Program and holds a CERT Certificate in Cybersecurity Oversight from the Software Engineering Institute/Carnegie Mellon University.
Colin Dyer <sup>(2)</sup>	Mr. Dyer is Chairman of the Supervisory Board of Unibail-Rodamco-Westfield, a role he has held since 2017. He was previously global Chief Executive Officer of Jones Lang LaSalle Incorporated from 2004 to 2016, when he retired. From 2000 to 2004, Mr. Dyer served as Chief Executive Officer of WorldWide Retail Exchange in the USA and from 1996 to 2000, he served as Chief Executive Officer of Courtaulds Textiles Limited (UK). Mr. Dyer holds a Bachelor of Science (Mechanical Engineering) from Imperial College in London, England and a Master of Business Administration from INSEAD in Fontainebleau, France.

Name	Education and Experience
Eric W. Slavens (Chair) <sup>(3)</sup>	Mr. Slavens is a Fellow of the Chartered Professional Accountants of Ontario and was a partner of PricewaterhouseCoopers LLP for thirty years, serving most recently as the National Leader, IPO Services. Mr. Slavens has a Bachelor of Commerce from the University of Toronto and is a graduate of the Directors' Education Program co-sponsored by Rotman School of Management and the Institute of Corporate Directors.

<sup>(1)</sup> Ms. Woodruff was Chair of the Audit Committee as of May 7, 2019.

<sup>(2)</sup> Mr. Dyer joined the Audit Committee on May 7, 2019.

<sup>(3)</sup> Mr. Slavens was Chair of the Audit Committee until May 7, 2019.

### External Auditor's Services

The aggregate amounts paid or accrued by Altus Group with respect to fees payable to the auditor, Ernst & Young LLP, of Altus Group for professional services for the years ended December 31, 2019 and 2018 were as follows:

Type of Service	Year Ended December 31, 2019	Year Ended December 31, 2018
Audit <sup>(1)</sup>	\$ 1,263,343	\$ 1,195,956
Audit-related <sup>(2)</sup>	80,000	212,421
Tax <sup>(3)</sup>	155,498	317,198
<b>Total</b>	<b>\$ 1,498,841</b>	<b>\$ 1,725,575</b>

<sup>(1)</sup> For professional services rendered by Ernst & Young LLP for the audit and quarterly reviews of the Company's consolidated financial statements and fees associated with statutory audits of certain of our subsidiaries in foreign jurisdictions.

<sup>(2)</sup> For professional services rendered by Ernst & Young LLP for the review of financial accounting and reporting matters and review of purchase price allocations.

<sup>(3)</sup> For professional services rendered by Ernst & Young LLP for tax compliance, tax advice and tax planning with respect to Canadian, U.S. and certain international jurisdictions; review of tax filings; assistance with the preparation of tax filings; tax advice relating to potential asset and business acquisitions/combinations; and other tax-related transaction services.

Our Audit Committee reviewed and approved the auditor's scope of work and budget for the year. All engagements of the auditor for non-audit and non-compliance tax services must be pre-approved by the Audit Committee. For 2019, there were total fees of \$155,498 with respect to approved non-audit services. These fees were incurred for various tax related services and were included in the tax category in the summary of professional fees payable to our auditor.

## 12. LEGAL PROCEEDINGS

In the ordinary course of business, we are involved in legal claims and suits made both by and against us. In our opinion, none of the claims or suits currently pending against us is expected to have a material adverse effect on our financial position.

## 13. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director or officer or principal Shareholder of Altus Group, or any associate or affiliate of any of the foregoing, has had any material interest, direct or indirect, in any transaction since January 1, 2017 that has materially affected or is reasonably expected to materially affect Altus Group.

## 14. TRANSFER AGENT AND REGISTRAR

AST Trust Company (Canada) acts as transfer agent and registrar of Altus Group. The register of transfers of each class of securities of Altus Group is located at AST Trust Company (Canada)'s principal transfer office in Toronto.

## 15. MATERIAL CONTRACTS

Except for those contracts entered into in the ordinary course of business, we have entered into the following material contracts which have been filed by Altus Group with Canadian securities regulators pursuant to Section 12.2 of National Instrument 51-102 - *Continuous Disclosure Obligations* and remain in effect:

- i. the amended and restated credit agreement dated March 24, 2020 among Altus Group Limited, Altus Group U.S. Inc., and Altus Group (UK) Limited, as borrowers, and Bank of Montreal, Toronto-Dominion Bank, National Bank of Canada and HSBC Bank Canada, pursuant to which Altus Group established the Credit Facilities, as further described under "General Development of Altus Group".

Copies of the foregoing documents are available on SEDAR at [www.sedar.com](http://www.sedar.com).

## 16. INTERESTS OF EXPERTS

Ernst & Young LLP, our auditor, has been named as having provided an opinion on the consolidated financial statements for the year ended December 31, 2019 contained in filings pursuant to National Instrument 51-102 - *Continuous Disclosure Obligations*. Ernst & Young LLP has advised that it is independent with respect to the Company in accordance with the CPA Code of Professional Conduct of the Chartered Professional Accountants of Ontario.

## 17. ADDITIONAL INFORMATION

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, is contained in our Management Information Circular for our most recent annual meeting of Shareholders at which directors were elected. Additional financial information is provided in our

consolidated financial statements and management's discussion and analysis for the year ended December 31, 2019.

Such documentation and additional information relating to Altus Group is available on SEDAR at [www.sedar.com](http://www.sedar.com), the internet site maintained by the Canadian Securities Administration, and on Altus Group's corporate website at [www.altusgroup.com](http://www.altusgroup.com).

## 18. GLOSSARY OF TERMS

“**Altus Analytics**” means a core service line of Altus Group that provides data, analytics software and technology-related services.

“**Asia Pacific**” means the Asia Pacific regions that Altus Group operates in, including Australia, China, Hong Kong, Thailand and Vietnam.

“**Board**” means the Board of Directors of Altus Group.

“**Common Shares**” means the common shares in the capital of Altus Group.

“**CRE Consulting**” means Commercial Real Estate Consulting, a core service line of Altus Group, combining Property Tax and Valuation and Cost Advisory services.

“**Credit Facilities**” means the credit facilities with our banking syndicate, as amended from time to time.

“**Geomatics**” means the land survey and land use core service line of Altus Group.

“**Preferred Shares**” means the preferred shares in the capital of Altus Group.

“**SEDAR**” means the System for Electronic Document Analysis and Retrieval maintained by the Canadian Securities Administrators.

“**Shareholders**” means the holders of Common Shares of Altus Group.

“**Tax Act**” means the *Income Tax Act* (Canada) and the regulations thereunder.

“**TSX**” means the Toronto Stock Exchange.

“**U.K.**” means the United Kingdom.

“**U.S.**” means the United States of America.

## 19. SCHEDULE "A"

### ALTUS GROUP LIMITED (the "Corporation")

#### AUDIT COMMITTEE CHARTER

##### PURPOSE

The Audit Committee (the "**Committee**") of the Corporation is appointed by the Board of Directors of the Corporation (the "**Board**") to assist the Board in fulfilling its responsibilities of oversight and supervision of:

- the quality and integrity of the accounting and financial reporting practices and procedures of the Corporation;
- the adequacy of the internal accounting and financial reporting controls and procedures of the Corporation;
- the compliance by the Corporation with legal and regulatory requirements in respect of financial disclosure;
- the quality and integrity of the consolidated financial statements of the Corporation;
- the qualification, independence and performance of the Independent Auditor of the Corporation;
- the assessment, monitoring and management of the financial risks of the Corporation's business ("Risks"); and
- any additional matters delegated to the Audit Committee by the Board.

In addition, the Committee provides an avenue for communication between the Independent Auditor, the Corporation's Chief Financial Officer ("CFO") and other Senior Management, other employees and the Board concerning matters relating to accounting, financial reporting, auditing and Risk management.

The Committee has the authority to conduct any investigation appropriate to fulfilling its responsibilities.

##### **Authority**

In discharging its obligations, the Committee shall act in accordance with its fiduciary duties. In this regard, nothing in this Charter is intended to, or shall have the effect of, limiting or impairing the independent decision-making authority or responsibility of the Board as mandated by applicable law.

##### **Delegation**

The Committee's responsibilities are the sole responsibility of the Committee and may not be delegated by the Board to a different committee without revisions to this Charter. The Committee may delegate work

to one or more of its members, and such members must report to the Committee at its next scheduled meeting or as otherwise mandated.

## **ROLES & RESPONSIBILITIES**

The Committee shall:

### **1. Independent Auditor**

#### **(a) Selection and Compensation of Independent Auditor**

Recommend to the Board:

- the Independent Auditor to be nominated for the purpose of preparing or issuing an audit report or related work or performing other audit, review or attest services for the Corporation (“Independent Auditor”); and
- the termination of the Independent Auditor; and
- the compensation of the Independent Auditor.

#### **(b) Audit Scope**

Annually review and approve the objectives and general scope of the external audit (including the overall audit plan, the proposed timing and completion dates) and discuss the external audit with the Independent Auditor.

#### **(c) Oversight of Independent Auditor**

Oversee and monitor the work of the Independent Auditor, the results of the external audit, and matters encountered in performing the audit, including with respect to the resolution of disagreements between Senior Management and the Independent Auditor regarding accounting and financial reporting.

#### **(d) Audit Deliverables**

Review with the Independent Auditor the contents of its results package and the contents of its audit and review reports.

#### **(e) Pre-Approval of Audit Fees**

Pre-approve, or establish procedures and policies for the pre-approval of, the engagement and compensation of the Independent Auditor in respect of the provision of all audit, audit-related, review or attest engagements required by applicable law.

(f) **Pre-Approval of Non-Audit Services**

Pre-approve all non-audit services permitted to be provided by the Independent Auditor in accordance with applicable law and rules governing the Independent Auditor, provided that the Committee may pre-approve certain services within designated thresholds on an annual basis and further provided that the Committee may delegate to the Chair of the Committee, or such other member or members of the Committee that it deems appropriate, certain pre-approval authority provided that any such approval granted by such persons shall be reported at the next regularly scheduled meeting of the Committee.

(g) **Independent Auditor's Quality Control Procedures, Performance and Independence**

Evaluate the quality control procedures, performance and independence of the Independent Auditor in carrying out its responsibilities, including obtaining and reviewing, at least annually, a report by the Independent Auditor describing:

- the firm's internal quality-control procedures;
- any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues;
- all relationships between the Independent Auditor and the Corporation confirming from the Independent Auditor of its independence from the Corporation, including a description of all matters that could have a bearing on its independence.

(h) **Staffing of Audit Team**

Review the experience and qualifications of the Independent Auditor's audit team assigned to the audit of the Corporation and make annual recommendations to the Board as to the need (if any) for rotation of the Independent Auditor or the members of the Independent Auditor's audit team assigned to the audit of the Corporation.

(i) **Relationship between Independent Auditor and Management**

Satisfy itself generally that there is a good working relationship between Senior Management and the Independent Auditor, and review:

- any management representations letters;
- the Independent Auditor's management letters and management's responses thereto;
- the Independent Auditor's schedule of unadjusted differences; and
- any other reports of the Independent Auditor.

(j) **Hiring from Independent Auditor**

Review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and any former Independent Auditor.

(k) **Evaluation of Independent Auditor**

Conduct a periodic evaluation (taking into account Senior Management's opinion) of the Independent Auditor's qualifications, performance and independence, and present to the Board the Committee's conclusions. The evaluation must consider and assess independence, objectivity and professional skepticism, quality of the engagement team, and quality of communications and interactions with the Independent Auditor. While assessments should be completed annually, a comprehensive review should take place at least every five years.

## 2. Internal Controls

(a) **System of Internal Controls**

Satisfy itself through review and discussion that Senior Management has established and is maintaining an adequate and effective system of internal control over financial reporting and is responding on a timely basis to any material weaknesses or significant deficiencies which have been identified, including by meeting with and reviewing reports of the Independent Auditor relating to the Corporation's internal controls.

(b) **Reports on Internal Controls**

Review and assess:

1. any concerns, weaknesses or deficiencies disclosed in connection with the interim and annual CEO and CFO certifications relating to the effectiveness of the Corporation's disclosure controls and procedures, internal control over financial reporting and significant changes in internal controls over financial reporting; and
2. the Independent Auditor's management letter and whether recommendations have been acted on and, if not, the appropriateness of the reasons why they have not been acted on.

## 3. Accounting Matters

(a) **Significant Accounting Policies and Critical Estimates**

Review and discuss with Senior Management and the Independent Auditor:

1. the selection, use and application of, as well as proposed material changes to, significant accounting policies, principles, practices and related critical estimates and judgments in accordance with International Financial Reporting Standards ("IFRS"); and

2. alternative IFRS treatments for policies and practices relating to material items, including the ramifications of such alternative disclosures or treatments and any recommended treatment,

to ensure that the significant accounting policies and practices adopted are appropriate and consistent with the Corporation's needs and applicable requirements.

(b) **Disagreements**

Satisfy itself that there is an agreed course of action leading to the resolution of significant unsettled issues between Senior Management and the Independent Auditor that do not affect the audited financial statements (e.g. disagreements regarding correction of internal control weaknesses or the application of accounting principles to proposed transactions), if any.

(c) **Contingent Liabilities**

Review all material contingent liabilities and the related accounting treatment, presentation and disclosure.

(d) **Related Party Transactions**

Review all material related party transactions and the related accounting treatment, presentation and disclosure.

(e) **Off-Balance Sheet Transactions**

Review all material off-balance sheet transactions and the related accounting treatment, presentation and disclosure.

(f) **Other Board Committee Reports**

Receive and review reports from other board committees with regard to matters that could affect financial reporting.

(g) **Expense Reports**

Review expense reports of the Chairman and Chief Executive Officer ("CEO"). Such authority may be delegated to the Chair of the Committee.

#### 4. Financial Disclosures

(a) **Disclosure Controls**

Satisfy itself that procedures are in place for the review of the Corporation's public disclosure to ensure consistent presentation of financial information extracted or derived from the Corporation's financial statements and assessing the adequacy of those procedures annually.

(b) **Approval of Disclosures**

Meet to review and discuss the Corporation's financial statements with Senior Management and the Independent Auditor and recommend, where appropriate to do so, to the Board, prior to release, the adoption and dissemination of all financial statements of the Corporation, together with related Management's Discussion & Analysis ("MD&A") of Results of Operations and Financial Position, earnings press releases, Annual Information Form ("AIF") and all other public disclosure documents of the Corporation containing financial information of the Corporation.

(c) **Audit Committee Report**

Prepare the Audit Committee report for inclusion in the Corporation's public disclosure documents in the form and at the time required by the laws, rules and regulations of applicable regulatory authorities.

(d) **Other Financial Information**

Review and discuss financial information and earnings guidance provided to analysts and rating agencies. This review need not be done on a case-by-case basis but may be done generally (consisting of a discussion of the types of information disclosed and the types of presentations made) and need not take place in advance of the disclosure.

**5. Risk Management**

(a) **Financial Risk Management**

Assess with Senior Management the Corporation's material exposure to Risks and the Corporation's actions to identify, monitor and mitigate such exposure.

(b) **Insurance Coverage**

Periodically review the adequacy of insurance coverages maintained by the Corporation.

(c) **Taxation**

Periodically review the status of taxation matters of the Corporation.

(d) **Legal Matters**

Review and assess the Corporation's General Counsel's summary of legal matters that may have a material impact on the financial statements, the Corporation's compliance with applicable laws and regulations and any material reports or inquiries received from regulators or governmental agencies.

## 6. Ethical Business Conduct

### (a) Code of Conduct

Monitor compliance with the Corporation's Code of Business Conduct and Ethics and the Corporation's policies and procedures regarding compliance with applicable laws and regulations; make recommendations to the Board, where appropriate, as to any waivers of compliance of such Code.

### (b) Whistleblower Procedures

Provide recommendations to the Corporate Governance and Nominating Committee and, as appropriate, the Board with respect to the implementation, operation and effectiveness of the Corporation's Whistleblower Policy as it relates to:

1. the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal controls, and auditing matters; and
2. the confidential, anonymous submission of complaints by employees of the Corporation regarding questionable accounting or auditing matters.

## 7. Reports to the Board

The Committee shall report to the Board on a regular basis and, in any event, before the public disclosure by the Corporation of its quarterly and annual financial results. The reports of the Committee shall include any issues of which the Committee is aware with respect to the quality or integrity of the consolidated financial statements of the Corporation, its compliance with legal or regulatory requirements, and the performance and independence of the Independent Auditor and changes in Risks.

### LIMITATION OF AUDIT COMMITTEE ROLE

The Committee is not responsible for:

- planning or conducting audits; or
- certifying or determining the completeness or accuracy of the Corporation's financial statements or that those financial statements are in accordance with IFRS.

Each member of the Committee shall be entitled to rely in good faith upon:

- financial statements of the Corporation presented to him or her by Senior Management or in a written report of the Independent Auditor to present fairly the financial position of the Corporation in accordance with IFRS; and
- any report of a lawyer, accountant, engineer, appraiser or other person whose profession lends credibility to a statement made by any such person.

“Good faith reliance” means that the Committee member has considered the relevant issues, questioned the information provided and assumptions used, and assessed whether the analysis provided by Senior Management or the expert is reasonable. Generally, good faith reliance does not require that the member question the honesty, competence and integrity of Senior Management or the expert unless there is a reason to doubt their honesty, competency and integrity.

#### **SIZE, COMPOSITION AND INDEPENDENCE**

(a) **Size**

The members of the Committee shall be three or more individuals who are appointed (and may be replaced) by the Board on the recommendation of the Corporate Governance and Nominating Committee. The appointment of members of the Committee shall take place annually at the first meeting of the Board after a meeting of shareholders at which directors are elected, provided that if the appointment of members of the Committee is not so made, the directors who are then serving as members of the Committee shall continue as members of the Committee until their successors are appointed. The Board may appoint a member to fill a vacancy that occurs in the Committee between annual election of directors. Any member of the Committee may be removed from the Committee by a resolution of the Board. Unless the Chair is elected by the Board, the members of the Committee may designate a Chair by majority vote of the members of the Committee.

(b) **Independence**

Each of the members of the Committee shall meet the Corporation’s Categorical Standard for Determining Independence of Directors.

(c) **Financial Literacy and Expertise**

Each of the members of the Committee shall be “financially literate” (or acquire that literacy within a reasonable period after appointment) in accordance with applicable legislation and stock exchange requirements.

(d) **Limit on Outside Audit Committees**

No member shall concurrently serve on the audit committee of more than three other public companies without the prior approval of the Committee, the Corporate Governance and Nominating Committee and the Board and their determination that such simultaneous service would not impair the ability of the member to effectively serve on the Committee (which determination shall be disclosed in the Corporation’s annual management information circular).

(e) **Independent Advisors**

The Committee may retain and compensate such outside financial, legal and other advisors at the expense of the Corporation as it deems reasonably necessary to assist and advise the Committee in carrying out the Committee’s duties and responsibilities.

(f) **Role of Chair**

The Chair of the Committee shall generally provide leadership to enhance the effectiveness of the Committee and act as the liaison between the Committee and the Board as well as between the Committee and Senior Management. The Chair shall also manage the Committee's activities and meetings, manage any outside legal or other advisors retained by the Committee and manage the process of reporting to the Board on the Committee's activities and related recommendations.

**COMMITTEE MEETING ADMINISTRATION**

(a) **Meetings**

The Committee will meet as many times as is necessary to carry out its responsibilities but in no event will the Committee meet less than four times a year. Meetings will be at the call of the Chair. Notwithstanding the foregoing, the Independent Auditor or any member of the Committee may call a meeting of the Committee on not less than 48 hours' notice. The notice period may be waived by a quorum of the Committee.

(b) **Committee Access to Employees and Others**

The Committee shall periodically meet separately with Senior Management and the Independent Auditor and may request any member of the Corporation's Senior Management or the Corporation's outside counsel or Independent Auditor to attend meetings of the Committee or with any members of, or advisors to, the Committee. The Committee may also meet with the investment bankers, financial analysts and rating agencies that provide services to, or follow, the Corporation.

(c) **Meeting Agendas**

The Committee Chair shall establish a preliminary agenda for each Committee meeting. Any director or other person entitled to call a meeting may request items to be included on the agenda for any meeting.

(d) **Quorum**

A quorum for meetings shall be a majority of the members of the Committee or such greater number as the Committee shall by resolution determine. The powers of the Committee may be exercised at a meeting at which a quorum of the Committee is present in person or by telephone or other electronic means or by a resolution in writing signed by all the members of the Committee entitled to vote on that resolution at a meeting of the Committee. Each member (including the Chair) is entitled to one (but only one) vote in Committee proceedings.

**ANNUAL EVALUATION**

At least annually and more frequently at the request of the General Counsel, the Committee shall, in a manner it determines to be appropriate:

- perform a review and evaluation of the performance of the Committee and its members, including the compliance of the Committee with this Charter, to be reviewed with the Board; and
- review and assess the adequacy of this Charter and the position description for its Chair and recommend to the Board any changes to this Charter or the position description of the Chair that the Committee determines to be appropriate, except for minor technical amendments to this Charter authority for which is delegated to General Counsel, who will report any such amendments to the Board at its next regular meeting.

**Board Approved: August 8, 2019**



# Altus Group

## **LISTINGS**

Toronto Stock Exchange  
Stock trading symbol: AIF

## **AUDITORS**

ERNST & YOUNG LLP

## **TRANSFER AGENT**

AST TRUST COMPANY (CANADA)  
P.O. Box 700  
Station B  
Montreal, Quebec, Canada H3B 3K3  
Toronto: (416) 682-3860  
Toll-free throughout North America: 1 (800) 387-0825  
Facsimile: 1 (888) 249-6189  
Website: [www.astfinancial.com/ca-en](http://www.astfinancial.com/ca-en)  
Email: [inquiries@astfinancial.com](mailto:inquiries@astfinancial.com)

## **HEADQUARTERS**

33 Yonge Street, Suite 500  
Toronto, Ontario, Canada M5E 1G4  
Telephone: (416) 641-9500  
Toll-free Telephone: 1 (877) 953-9948  
Facsimile: (416) 641-9501  
Website: [www.altusgroup.com](http://www.altusgroup.com)  
Email: [info@altusgroup.com](mailto:info@altusgroup.com)