### Annual Meeting of Shareholders May 4, 2023 Remarks by Timothy J. O'Shaughnessy Chief Executive Officer Graham Holdings



#### **GRAHAM HOLDINGS COMPANY – ANNUAL MEETING**

May 4, 2023



#### DISCLAIMER

These presentations at this meeting contain certain forward-looking statements that are based largely on the Company's current expectations. All public statements made by the Company and its representatives that are not statements of historical fact, including certain statements in this presentation, the Company's Annual Report on Form 10-K, its Current Reports on Forms 8-K, the Company's 2022 Annual Report to Stockholders, and the Form 10-Q for the first quarter are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995.

Forward-looking statements are subject to certain risks and uncertainties that could cause actual results and achievements to differ materially from those expressed in the forward-looking statements. Actual results may differ materially from those projected as a result of certain risks and uncertainties. Other forward-looking statements include comments about expectations related to acquisitions or dispositions or related business activities, including the TOSA, the Company's business strategies and objectives, the prospects for growth in the Company's various business operations and the Company's future financial performance. As with any projection or forecast, forward-looking statements are subject to various risks and uncertainties that could cause actual results or events to differ materially from those anticipated in such statements. Accordingly, undue reliance should not be placed on any forward-looking statement made by or on behalf of the Company. The Company assumes no obligation to update any forwardlooking statement after the date on which such statement is made, even if new information subsequently becomes available.

For more information about these forward-looking statements and related risks, please refer to the section titled "Forward-Looking Statements" in Part 1 of the Company's Annual Report on Form 10-K, the Company's Current Reports on Forms 8-K, and its Form 10-Q for the first quarter and the section titled "Corporate Governance/Risk Factors" under "Investor Relations" on the Company's website, www.ghco.com.

In addition to the results reported in accordance with accounting principles generally accepted in the United States (GAAP) included in this presentation, the Company is providing certain non-GAAP financial measures. The most directly comparable GAAP financial measure and a reconciliation of such non-GAAP financial measures to the most directly comparable GAAP financial measures can be found in the appendix of this presentation.



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Welcome back to the Hamilton Live, now in its second year hosting the Graham Holdings Annual Shareholder meeting. It's my obligation to remind you that a late breakfast around the corner at the Old Ebbitt Grill is the perfect way to top off your time here.

It's wonderful to see those attending the meeting in person again this year. Many members of management are also in attendance, so I hope you've been able to chat with the folks that run the businesses day-in and day-out.

I will provide an update on operations and then I will hand the mic over to Andy Rosen, Kaplan's CEO, who will spend some time discussing the operations at Kaplan International.



# In recent years, we've discussed the shifting makeup of our business. As you can see, that trend continued in 2022. While we've been able to add additional segments, such as automotive and healthcare, that were not meaningful only a few years ago, we've also reached a point where we believe the Company can consistently grow, both organically and via bolt-on acquisition.

#### **REVENUE DISTRIBUTION**

#### **GRAHAM HOLDINGS FINANCIAL RESULTS**

Revenues	2019	2020	2021	2022	Q1 2022	Q1 2023	% Change
Education	\$1,452	\$1,306	\$1,361	\$1,428	\$358	\$378	6%
Broadcasting	463	525	494	536	123	113	(9%)
Manufacturing	449	416	458	487	116	115	(1%)
Healthcare	162	198	223	326	67	102	52%
Automotive	236	258	327	734	151	233	54%
Other Businesses and eliminations	170	186	322	414	99	91	(8%)
Total Revenues	\$2,932	\$2,889	\$3,186	\$3,924	\$915	\$1,032	13%
Adjusted Operating Cash Flow <sup>1</sup>	2019	2020	2021	2022	Q1 2022	Q1 2023	% Change
Education	\$100	\$83	\$111	\$142	\$36	\$39	8%
Broadcasting	182	217	172	223	45	34	(26%)
Manufacturing	57	52	48	65	18	15	(18%)
Healthcare	17	33	32	34	8	9	19%
Automotive	3	3	14	38	8	12	52%
Other Businesses	(26)	(57)	(63)	(75)	(23)	(24)	(4%)
Corporate Office	(45)	(46)	(52)	(50)	(11)	(13)	(14%)
Total Adjusted Operating Cash Flow <sup>1</sup>	\$287	\$284	\$263	\$378	\$80	\$72	(11%)
Capital Expenditures	(94)	(66)	(163)	(82)	(13)	(22)	(70%)
		\$218	\$100	\$295	\$67	\$49	(27%)

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\$ in millions

<sup>1</sup> Non-GAAP measure – see reconciliation in appendix Note: the sum of certain amounts may not equal the total due to rounding

This changing makeup of the business likely means the overall "lumpiness" of earnings, where earnings in even years are disproportionately driven by political advertising at Graham Media Group, may be diminished in the future. For example, from 2021 to 2022, adjusted operating cash flow at the broadcast group increased year over year by \$51 million, largely due to the election cycle. However, the Company's total adjusted operating cash flow increased by \$115 million, meaning the rest of the Company grew adjusted operating cash flow by \$64 million. We believe some version of this should continue in 2023 and most years in the future.

In Q1, revenue increased 13% over prior year and adjusted operating cash flow decreased 11%, from \$80 million to \$72 million. Overall, we are pleased with most of the results in our segments. We did have a few comparative headwinds - Q1 of 2022 had large wood gains at Hoover that were not repeated in 2023, and Graham Media Group benefitted from primaries, the Winter Olympics and the Super Bowl in 2022, none of which occurred on our stations in 2023.

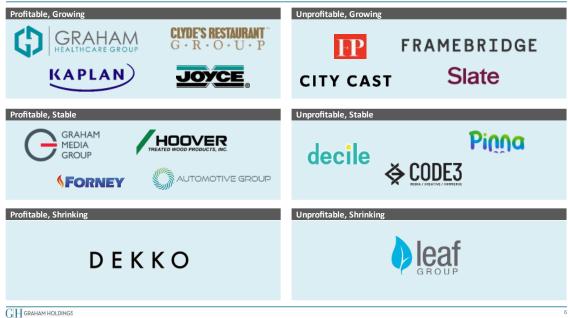
I'd like to take a minute and discuss why we are presenting "adjusted operating cash flow" in our results alongside our capital expenditures. At the core, we're trying to give ourselves, and

you, our shareholders, a proxy for the cash flow generation capabilities of the Company. Adjusted operating cash flow takes our operating income and excludes our amortization, depreciation, and pension expenses. I'll offer a brief explanation in that order:

- As many of you know, our amortization expense is non-cash. As such, we exclude it from our operating cash flow numbers.
- Depreciation this is a real cash expense but is more reflective of the past than the present.
- Pension expense this is the area where we are most unique as compared to many other companies. We have an active defined benefit plan with employees accruing benefits at present day. However, we have a pension trust that is funded at a level several multiples higher than our actual liabilities. The trust's funding is at a level where servicing existing and future benefits is plausible with existing assets in all but the most draconian scenarios. What that means is that the pension expense that flows through the Company's P&L will not require cash from our treasury or hit the cash flow statement. It is covered by the overfunded pension trust. We are actively trying to figure out how to leverage the pension trust for additional expenses that may currently be paid out of treasury. This is important to note, because if our pension expense goes up, it's more likely than not a *good* thing, as the cash flow profile of the business may have improved, even if reported earnings decline.

Lastly, we like to show capital expenditures next to adjusted operating cash flow because it gives a pretty good sense of what pre-tax free cash flow for the period looks like. Of course, by their nature, capital expenditures can be lumpy and include things like property acquisitions, but in combination, adjusted operating cash flow and capital expenditures should provide a meaningful indication of the Company's pre-tax free cash flow.

#### **BUSINESS UNIT CLASSIFICATIONS**



We'll discuss unit specific results shortly, but I wanted to provide a bit of an overview of the portfolio of businesses at GHC, as well as how we think about next steps based on their current financial profiles. At the core, we have businesses that are either profitable or unprofitable; they are also either growing, shrinking, or relatively stable. While the profitable versus unprofitable distinction is entirely quantitative, the growing vs stable vs shrinking dynamic is my interpretation of the blend of recent history combined with near-term expectations.

For our profitable growing businesses, our goal is to build out durability and evaluate bolt-on M&A transactions that can be both accretive and expand the moat. We are pleased that two of our biggest businesses fall into this category.

For our profitable stable businesses, the approach is largely similar to the prior category, with perhaps an additional eye toward protecting and defending. We will pursue bolt-on M&A in this category as well.

With any profitable shrinking businesses, we hope to protect profitability while stabilizing revenue and/or income declines. We are unlikely to pursue bolt-on M&A, but would look at participating in consolidation if it were required to maintain viability for a sector.

Now let's move to the other side of the ledger.

At our unprofitable growing businesses, we continue to monitor the unit economic models and evaluate how much cumulative capital we believe is required for a business to become selfsustaining, the scale of the opportunity, and the timeframe in which we believe we can achieve profitability. We calibrate investment levels to achieve adequate returns. M&A rarely makes sense in these cases; although I would not unilaterally rule it out if we were convinced it would reduce the cumulative capital needed to become profitable.

At our unprofitable stable businesses, we evaluate the following:

- 1. Whether growth can reasonably be restarted with attractive unit economics;
- 2. Whether costs can be reduced to an extent where the business becomes profitable;
- 3. If divestiture is possible and makes sense;
- 4. Failing the above, evaluate closure.

While it may be inevitable from time to time, we hope to limit both the number and duration of stay of any businesses in our last category —the unprofitable shrinking bucket. When one of our companies winds up here, we evaluate all options, ranging from restructure, to sale, to closure. Our bias is to move fast, as without substantial change, things usually get worse, not better. We currently have one business that we classify in this bucket, Leaf Group. We will discuss Leaf shortly.

We've had success in having units exit from an unprofitable group. In recent history, Megaphone and Forney "graduated" out of this category. At present, we are optimistic that Code3, Slate, and Foreign Policy are on the cusp of doing so as well.

Now let's segue to the unit specific operating results.

#### **EDUCATION DIVISION**

\$ in millions

Revenues	2019	2020	2021	2022	Q1 2022	Q1 2023	% Change
Kaplan international	\$750	\$654	\$727	\$816	\$205	\$227	11%
Higher education	306	316	318	304	76	76	1%
Supplemental education	389	327	309	302	76	74	(4%)
Kaplan corporate and other	7	9	7	6	1	1	(26%)
Total Revenues	\$1,452	\$1,306	\$1,361	\$1,428	\$358	\$378	6%
1							
Adjusted Operating Cash Flow <sup>1</sup>	2019	2020	2021	2022	Q1 2022	Q1 2023	% Change
Kaplan international	\$58	\$35	\$55	\$96	<b>Q1 2022</b> \$26	\$28	5%
			-				
Kaplan international	\$58	\$35	\$55	\$96		\$28	5%
Kaplan international Higher education	\$58 21	\$35 32	\$55 32	\$96 32	\$26 7	\$28 9	5% 20%
Kaplan international Higher education Supplemental education	\$58 21 46	\$35 32 33	\$55 32 47	\$96 32 32	\$26 7 6	\$28 9 6	5% 20% 1%
Kaplan international Higher education Supplemental education Kaplan corporate and other	\$58 21 46 (26)	\$35 32 33 (17)	\$55 32 47 (23)	\$96 32 32 (17)	\$26 7 6 (4)	\$28 9 6 (4)	5% 20% 1% 4%

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<sup>1</sup> Non-GAAP measure – see reconciliation in appendix Note: the sum of certain amounts may not equal the total due to rounding

I've asked Andy to provide a more detailed overview of Kaplan International, so I will only briefly review results at Kaplan. As you'll hear more about, the recovery post pandemic has been led by Kaplan International. Overall, the adjusted operating cash flow at Kaplan increased from \$111 million to \$142 million. The higher education business, led by our partnership with Purdue, continues to be a steady contributor to earnings. As previously conveyed, the traditional "Test Prep" business has suffered from a diminished test-taking environment and has pulled down the results at Supplemental Education. These overall trends continued into Q1.

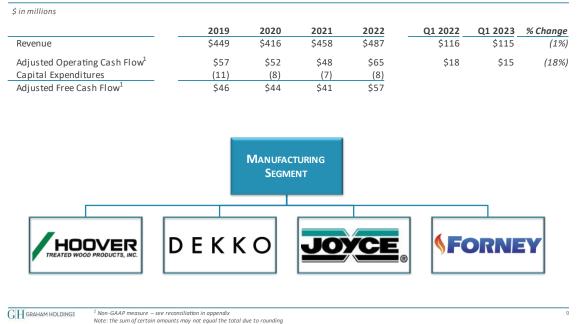
#### BROADCASTINGSEGMENT

#### GRAHAM MEDIA GROUP

2019	2020	2021	2022	Q1 2022	Q1 2023	% Chang
\$463	\$525	\$494	\$536	\$123	\$113	(9%
\$182	\$217	\$172	\$223	\$45	\$34	(26%
(19)	(13)	(7)	(6)			
\$163	\$204	\$166	\$217			
obc Expect more.	DMA: 31		<b>b</b> C	NEWS	<b>Roanoke, VA</b> DMA: 71 <i>NBC</i>	
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	\$463 \$182 (19) \$163 Expect more.	\$463   \$525     \$182   \$217     (19)   (13)     \$163   \$204     Image: Second Control of Contr	\$463   \$525   \$494     \$182   \$217   \$172     (19)   (13)   (7)     \$163   \$204   \$166     San Antonio, TX     DMA: 31   ABC     ABC   Image: Antonio, TX     Jacksonville, FL   DMA: 41     Independent   Jacksonville, FL     DMA: 41   Independent	\$463   \$525   \$494   \$536     \$182   \$217   \$172   \$223     (19)   (13)   (7)   (6)     \$163   \$204   \$166   \$217     San Antonio, TX     DMA: 31   ABC   600     Jacksonville, FL   DMA: 41   Independent     Jacksonville, FL   DMA: 41   C     Jacksonville, FL   DMA: 41   C	\$463   \$525   \$494   \$536   \$123     \$182   \$217   \$172   \$223   \$45     (19)   (13)   (7)   (6)   \$163   \$204   \$166   \$217     \$163   \$204   \$166   \$217   \$45   \$45     \$163   \$204   \$166   \$217   \$45     \$MA: 31   \$BC   \$66   \$166   \$217     \$MA: 31   \$BC   \$66   \$166   \$217     \$MA: 41   \$166   \$217   \$66   \$166     \$MA: 41   \$166   \$217   \$66   \$66     \$163   \$204   \$166   \$217   \$66     \$163   \$204   \$166   \$217   \$166     \$164   \$166   \$217   \$166   \$217     \$165   \$204   \$166   \$217   \$166     \$166   \$217   \$166   \$217   \$166     \$166   \$217   \$166   \$166   \$166     \$166   \$166   \$166   \$166   \$166     \$166   \$166	\$463   \$525   \$494   \$536   \$123   \$113     \$182   \$217   \$172   \$223   \$45   \$34     (19)   (13)   (7)   (6)   \$163   \$204   \$166   \$217     \$163   \$204   \$166   \$217   \$Max: 31   \$Max: 31   \$Max: 71   NBC     \$Max: 31   \$ABC   \$Max: 31   \$Max: 71   \$MBC   Detroit, MI     \$Max: 41   Independent   \$Max: 41   DMax: 41   Atlanta, GA     \$Max: 41   \$Max: 41   \$Max: 41   \$Max: 41   Atlanta, GA

The broadcasting segment had a record year in 2022, which was a nice way to ring in Catherine Badalamente's tenure as CEO at Graham Media Group. Adjusted operating cash flow increased from \$172 million to \$223 million and grew \$6 million over the previous election cycle year, 2020. Core advertising remained strong and political spending in Michigan and Texas helped drive results. We continue to watch the trends in the business closely and noted a modest acceleration in cord cutting and the corresponding impact on net retransmission revenue as the year progressed. Growth in OTT revenue continues to be an important part of the future and we are hopeful it can be a partial offset to cord cutting and the corresponding impact on retransmission.

#### MANUFACTURING SEGMENT



2022 was a nice year at our manufacturing segment, as adjusted operating cash flow grew from \$48 million to \$65 million. Results were down modestly in Q1 as we lapped a large wood gain in Q1 of 2022. As a reminder, over the course of any 12-month period, we tend to have modest profitability in the buying of wood at Hoover. Wood is largely a pass-through cost to our customers; we receive our margin from treating the wood and efficiently delivering it to the customer. But we buy wood at large volumes and over time, we tend to make a little bit of money on the wood itself. However, as wood prices swing, we can have short term inventory value volatility that can cause a large gain or loss in any particular quarter. In Q1 of 2022, we had a large gain that was not repeated in Q1 of 2023 (and in fact, most of those gains were given back over the remainder of 2022).

Hoover continues to be a strong business providing a vital product to the construction industry. Additionally, Forney and Joyce continue to be steady contributors to our company. Dekko's operations continue to be under pressure from the reduced demand for commercial real estate and office buildouts, causing declines in the power and data business. Dekko has been able to remain profitable, but at reduced earning power. The team continues to explore ways to protect the income statement until the market stabilizes.

#### HEALTHCARE SEGMENT



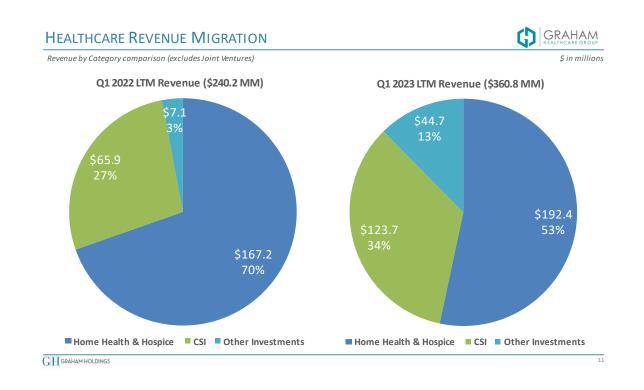
\$ in millions							
	2019	2020	2021	2022	Q1 2022	Q1 2023	% Chang
Revenue	\$162	\$198	\$223	\$326	\$67	\$102	52
Adjusted Operating Cash Flow <sup>1</sup>	\$17	\$33	\$32	\$34	\$8	\$9	19
Capital Expenditures	(2)	(2)	(4)	(3)			
Adjusted Free Cash Flow <sup>1</sup>	\$15	\$30	\$28	\$31			
oint Ventures	2019	2020	2021	2022	Q1 2022	Q1 2023	% Chang
Equity in Earnings of Affiliates	\$4	\$10	\$10	\$8	\$2	\$3	42
WHOLLY-OWNED HH/HP 100% Ownership			WEEN 50-100%			<b>ENTURES</b> (	-
residential		CCTPH	IARMA	V	· · · · ·	Allegheny Health Netw	
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			MEISS MEDICA llergy, Asthma & Immunol ediatrics & Adults	AL SURPASS		Home Health, Hospice &	ed

At last year's annual meeting, I asked David Curtis and Justin DeWitte, co-CEO's of Graham Healthcare Group (GHG), to present on our healthcare business, as it has become a bigger piece of Graham Holdings and I expect that trend to continue.

As a reminder, we have three different types of operations at GHG:

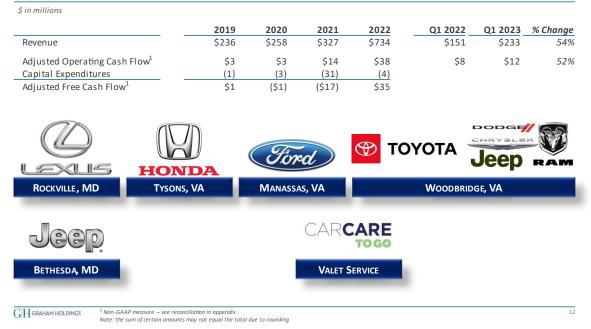
- 1. Wholly-owned operations in the home health and hospice fields;
- Home health and hospice joint venture operations where we typically own less than 50%, but we manage the operations; and,
- Majority investments where we own between 50 and 100% of the business, usually in related or adjacent fields.

Adjusted operating cash flow results in 2022 were up modestly from the prior year, although revenue was up 46%. As previously discussed, in 2022, we invested in building up our team's capabilities and scaling ahead of anticipated growth. In Q1, revenue continued its strong growth rate and adjusted operating cash flow, as well as equity earnings in affiliates were each up meaningfully from the prior year. As the year progresses, we are optimistic that we will begin to see operating leverage from these investments. These will help maintain our excellence of care standards as well as drive an improved income statement.



I also want to provide a sense of the shifting nature of Graham Healthcare Group. While this slide excludes our JV ventures, so it is not a comprehensive overview, it does give a sense of the growth characteristics at CSI Pharmacy and other direct investments. Our expectation is that, if we were to show this pie again next year, a further shift will be reflected.

#### AUTOMOTIVE SEGMENT

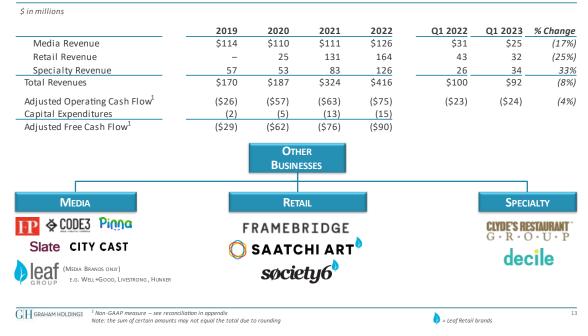


The automotive segment is predominantly comprised of franchise dealerships. These are owned in partnership with and managed by Chris Ourisman and his team. 2022 was a good year. Adjusted operating cash flow grew from \$14 million to \$38 million. This growth was due to improved results at existing rooftops, as well as the addition of several acquired dealerships.

We think we have a formula that works in this segment. We have partnered with an operator with family roots in the DC automotive market that date back over 100 years. We've also been able to use our increasing scale to improve functions at newly acquired dealerships. Results were once again up from Q1 2022 to Q1 2023 for the same reasons discussed.

The sector has certainly had tailwinds that have helped drive results over the past two years. In the coming years, we expect some of those tailwinds to die down and others to persist, but for our group to still maintain strong cash flow characteristics.

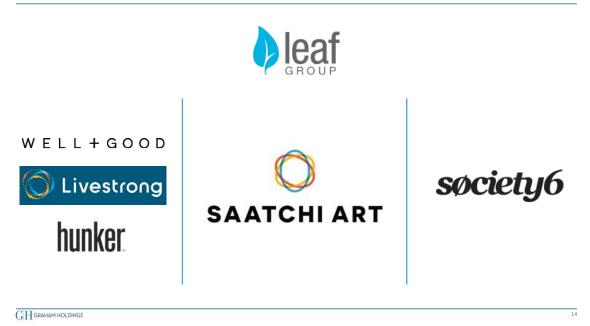
#### **OTHER BUSINESSES**



Our other businesses group had a mixed 2022 and Q1 of 2023. As previously stated, we expect, and continue to expect, 2022 to be the peak investment year. In 2022, revenue increased from \$324 million to \$416 million, while adjusted operating cash flow losses increased from \$63 million to \$75 million. In Q1, revenue declined by 8% as compared to the prior year and adjusted operating cash flow losses were roughly flat.

The biggest driver of negative performance in this segment has been the results at Leaf Group. For both 2022 and Q1 of 2023, segment results excluding Leaf were improved on both the revenue and adjusted operating cash flow sides. To provide more clarity, in Q1 2023, excluding Leaf, revenues for the rest of the segment grew percentage wise by double digits while adjusted operating cash flow showed a similar improvement.

As addressed in the Annual Letter to Shareholders, clearly the results at Leaf Group have been far below our expectations at the time of the acquisition. I wanted to take this opportunity to update you on some recent changes.



First, a refresher. Leaf Group is comprised of three business units:

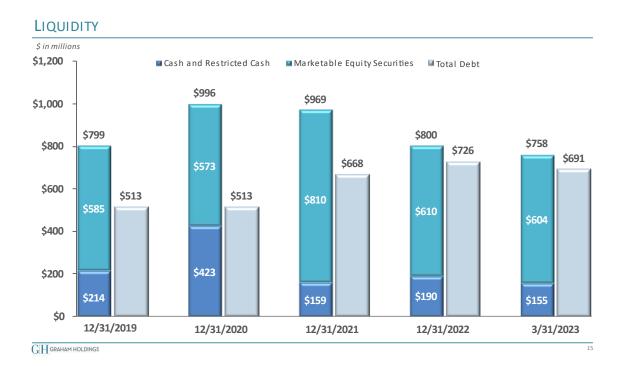
- Leaf Media A collection of lifestyle brands, such as Well+Good, Livestrong, and Hunker;
- Saatchi Art A marketplace for artists to reach a wider audience to sell their original works; and,
- Society6 An online retailer that allows artists to upload original designs which Society6 then applies to products manufactured through print-on-demand partners.

These units each have business owners and have reported into a centralized Leaf Corporate team, which provides a set of G&A functions and shared services.

Earlier this year, the CEO of Leaf Group left the business. We concurrently came to the conclusion that a holding company reporting to a holding company was not serving the interests of the business well or driving the desired results. Subsequently, we are working with the Leaf team to begin a process of creating three standalone businesses that will report directly into Graham Holdings. At the end of this period, Leaf Group will no longer exist as a consolidated business.

We expect much of this transition to occur in the second quarter, with some additional transition-related items occurring over the remainder of the year. With this effort, we expect annual costs to be reduced by no less than \$15 million with minimal risk to revenue.

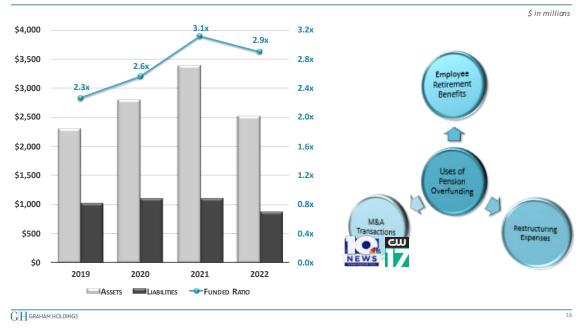
There are good people at the Leaf businesses committed to driving these improvements in operations and I'd like to thank them for their recent efforts as well as their efforts in the months ahead.



Let's now move away from operations and the income statement to the balance sheet.

Liquidity at the Company remains strong, and cash and marketable securities continue to modestly outpace total debt. We consider both our gross and net leverage ratios as conservative.

#### **PENSION UPDATE**



Lastly, it wouldn't be a Graham Holdings annual meeting without at least one reference to our pension plan funding status. At year end, both assets and liabilities were down from the prior year, with the decline in assets outpacing the decline in liabilities. This took our overfunding status down modestly from 3.1x overfunded to 2.9x overfunded. As discussed earlier, we continue to explore additional ways to use the pension funding.



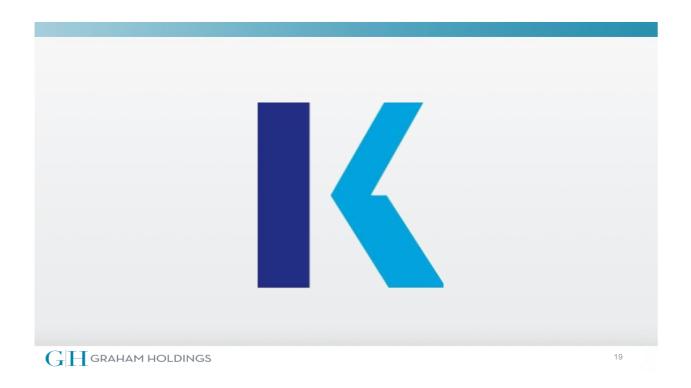
At this time, I'd like to ask my colleague, Andy Rosen, to come up and discuss the progress at Kaplan International. Take it away, Andy.

Annual Meeting of Shareholders May 4, 2023 Remarks by Andrew S. Rosen Chief Executive Officer Kaplan, Inc.



Presenter: Andy Rosen

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Thanks Tim.

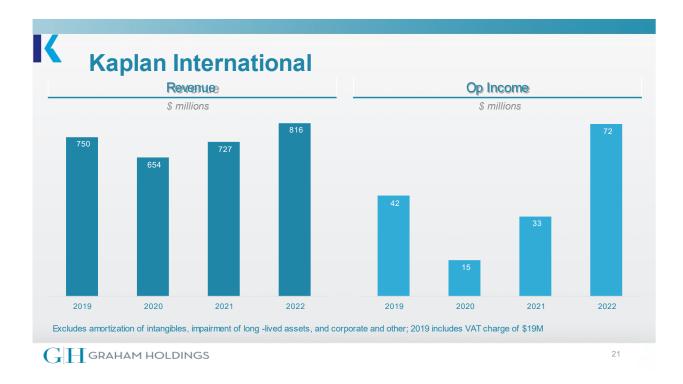
Over the past few years, I've described how we are positioning Kaplan for growth by leveraging our strong relationships with students and partners, as well as our unique assets and capabilities. I've included in my reports an assessment of the impact of the pandemic.

Fortunately, with the pandemic behind us, we have emerged with an even stronger market position, as we've spent the last several years embedding more earnings power into the businesses. This is particularly true at Kaplan International, so I thought I would spend time today highlighting how this business has progressed.



As a reminder we have two primary divisions: Kaplan North America, and Kaplan International. In North America, our Higher Ed and Supplemental Education businesses provide online enablement and other services for universities, as well as test prep and professional education programs for students and businesses. Kaplan International provides a range of professional, higher education and language programs operated mostly outside of the U.S.

As you can see, Kaplan International (or "KI," as we refer to it internally) as a percentage of Kaplan has evolved over the last decade to become the largest contributor to Kaplan's revenue and operating income. For 2022, Kaplan International comprised 57% of our consolidated revenue and \$72 million in operating income, respectively.



As I've pointed out earlier, the pandemic was hard on our international businesses, most of which rely on students traveling abroad for study. You see that here in the revenue and operating income figures for 2020 and 2021. The Languages business was hardest hit, as these students are looking for an immersive cultural experience that cannot be replicated online. Our Australia-based businesses also suffered from that country's extended lockdown. For the most part, our other international businesses held up surprisingly well. During the pandemic, we strengthened these businesses with investments in digital capabilities, relationship-building, and a leaner expense infrastructure.

Over the next few slides, I want to spend a few minutes describing our KI businesses, our approach in developing our international position, and a few of the differentiating elements that illuminate why we believe we have something special.



#### GH GRAHAM HOLDINGS

Our primary international business activities can be summarized into the following groupings:

22

At **Pathways**, we recruit qualified students from around the world to our U.K, U.S. and Australian university partners. Sometimes we recruit these students for direct admission to university degree programs, but in most cases we provide the first, foundational year of the education, typically (but not always) on the campus of the university partner. For 2022, we served more than 16,000 students under these "pathway" offerings. Our pathway students achieve impressive outcomes; more than 92% matriculate to their first or second choice university, usually the campus with which their pathway program was affiliated. These programs provide immense socioeconomic mobility for students, and significant diversity and financial benefits to our university partners. During the pandemic, many of these students began their pathway studies online, and an increasing percentage live in Kaplan residence halls on or near their home campus.

We offer a range of **Professional** education and assessment products mostly in the U.K., Australia, Singapore, and the Middle East focused on the accountancy, finance, wealth management, legal, project management and technology professions. Our programs prepare students to obtain or maintain required licensure or certifications to practice in their designated fields, and to improve their performance in their jobs as professionals and leaders. We contract with hundreds of companies in this effort and have established a strong reputation over many years for quality student outcomes and client satisfaction. We served approximately 123,000 students across these product lines in 2022.

At our **Languages** business, we served about 31,000 students in 2022 across our English, French, German and Italian language schools. Our activities in Languages also include our ownership and operation of the largest student recruitment agency in Europe, and popular summer language camps in Europe. Students attending our core language programs are seeking to improve their language proficiency while having a fun, immersive experience in a different country with other similarly minded students. Not surprisingly, this business was hit the hardest by the pandemic as students were unable to travel for the better part of two years. 2022 saw the re-opening of student travel in most markets, though China's reopening was largely deferred until late in the year. A material recovery in our Language financial results happily followed suit.

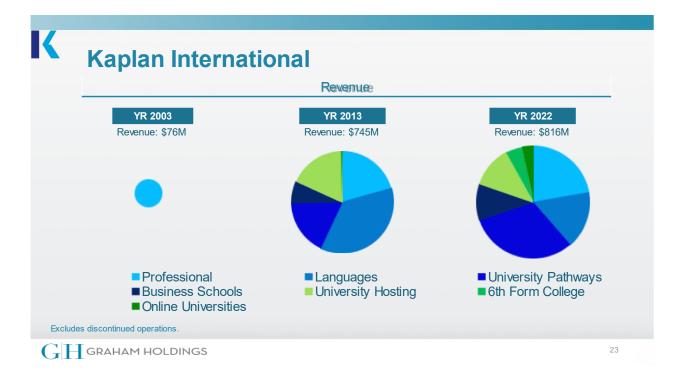
We own and operate **Business Schools** located in Dublin, Ireland and five of Australia's largest cities. In 2022, we served close to 6,000 students in these schools, a census level depressed by the pandemic-induced closure of Australia to international students for 2020 and 2021. Despite the challenges of the pandemic, the leaders of our business schools stayed focused on delivering high quality student outcomes, adding new programs of study and building our reputation in new and existing international student source markets. The result is record new enrollment levels as we finished last year and commenced 2023.

Our **University Hosting** programs are centered in Singapore. In this unit, we offer our own higher education programs and "host" a number of university partner programs, in total serving approximately 10,000 students in the Singapore market. Hosting activities include providing teaching facilities, recruitment, admission and pastoral care services, and in some cases teaching the programs – all under the auspices of our university partners and Singapore regulatory authorities. The private education market in Singapore is tightly regulated, with occasional missteps, even minor ones, receiving sanctions. Even with our extensive global compliance environment, we've seen this ourselves, most recently in 2021. But our team responded quickly and decisively, working with the government to resolve issues that had a

short-term negative impact on our earnings. We place a high priority on a positive relationship with regulatory authorities around the world, and see good opportunities for growth in our university hosting business.

Our **6<sup>th</sup> Form Colleges** operate under the brand name Mander Portman Woodward (or "MPW") at three school locations in London, Birmingham, and Cambridge, England. The MPW programs serve students who are strongly dedicated to improving their A-level and GCSE exam scores to help them qualify for entry into highly selective UK universities. The MPW curriculum is intensely focused, delivered with an average student-teacher ratio of 6 to 1, and includes extensive student support services. About thirty percent of our MPW students travel to England from other countries to take our programs. This portion of our student enrollment was negatively impacted by the pandemic, but is now nicely recovering. We served 3,000 students at MPW in 2022.

Finally, we have made meaningful progress over the past five years in building our **Online Higher Education** programs with UK universities. This unit, Kaplan Open Learning, has multiyear, exclusive contracts with the University of Essex and the University of Liverpool to provision a significant range of undergraduate and graduate programs online. Our services under these contracts range from student marketing and recruitment through to delivery under the close supervision of our university partners. We served 5,000 students at KOL in 2022, mostly from the UK. However, we are excited about the growth in enrollment possibilities outside the UK market.



Twenty years ago, KI consisted largely of our UK professional business, which focused primarily on accountancy training. Since then, we've grown consistently by expanding into adjacent areas that leverage our expertise. We will continue to do so, as we see enormous opportunity to tap into a powerful global trend: Expanding middle class populations across the world want access to quality higher and professional education, but often face a dearth of options in their home countries. KI's expertise in international student recruitment, language services, academic and professional course delivery, and pastoral care serve as a foundation upon which we will continue to build.

I want to give you a sense of why Kaplan has such a unique advantage here:



Operating internationally is highly complex, so being strong on the fundamentals is critical. These boxes each represent essential areas where KI has market strength and advantage.

The first box in this graphic is "people" for an obvious reason: KI requires highly skilled, trusted professionals and leaders with deep regional expertise across many global markets and areas of specialization. Granted, I'm not entirely unbiased, but I think almost anyone would agree the KI leadership team is the deepest, most experienced and most able of any in international education. David Jones, KI's CEO, is the dean of international educators; he's led high-powered, high-quality organizations for more than four decades (just under half of that with us) and is legendary for his relationships and insight. His right hand, Andrew Thick, is similarly admired and has his own very deep experience and expertise, including overseeing Study Group back in the day. They work with a group of country, product, academic, sales and home office leaders who are, person by person, the best in the business. Most of this team has worked together for years, steadily building KI's capabilities and culture in a careful, compliant and pro-student manner. Top to bottom, KI's team is deeply experienced, ethical, caring and driven to achieve strong outcomes.



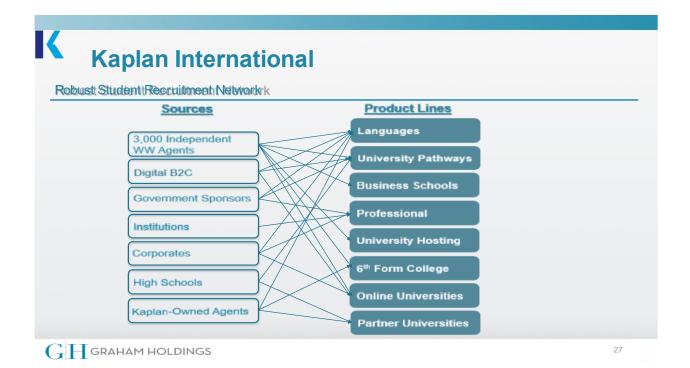
That leadership team is distributed across an extensive global footprint. From sales offices strategically located in attractive student source markets around the world, to school and delivery locations in sought-after destinations in the UK, Europe, Americas, Australia and Singapore, KI's footprint provides the geographic diversity and local capabilities to capitalize on and respond to emerging geopolitical and economic trends. From these office locations, through relationships, partnerships and employees, Kaplan's reach extends to virtually every country in the world.

An example: In 2021 and continuing throughout 2022, China's COVID policy sharply limited the number of Chinese students studying abroad, a troubling development for us as Chinese students were an important source for KI's programs. KI's long presence in India, and scores of smaller countries in every corner of the world where Kaplan has built deep relationships, enabled KI to continue to serve our partners and the rapidly growing demand for international education in those countries, resulting in a total enrollment for 2022 that grew nicely – offsetting the negative impact from China through new sources. That's a performance trend that continues into 2023.

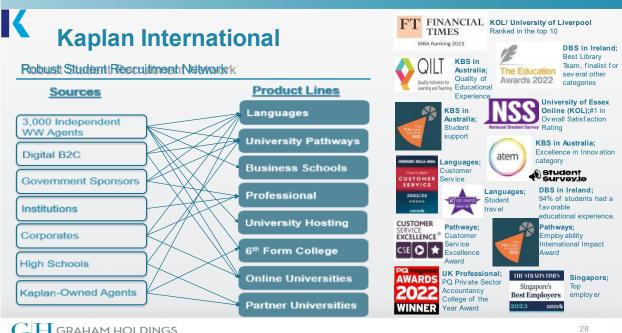


When we talk about our programs with prospective students, they are interested in a number of factors, but right near the top of their list is the reputation of the university partners we represent in the locations where they want to study. The quality of the university partner portfolio our KI team has steadily and carefully assembled is paramount to the earning power of KI's higher education businesses. The prestige of many of the corporations, certifying bodies, and professional associations presented here are also powerful in driving the earning power of KI's professional education businesses. And a reminder, by the way, that we're just talking about KI partnerships here; this slide doesn't reflect any of the large number of Kaplan North America partnerships. The network effect of the total, which grows each year, creates new and interesting growth opportunities for KI.

An example: earlier this year, our Pathways business secured a new contract to provide international student recruiting for the University of Victoria in British Columbia, Canada. Canada is an increasingly attractive destination for international students. This new partnership was actually led by our Australia team, which had a strong relationship with the President and Vice Chancellor at UVic based on his previous tenure leading a strong partner university in Australia, but leveraged Kaplan talent and capabilities from around the globe. Our excellent reputation and the strength of our university partnerships continually pays dividends.



The ability to economically source qualified students throughout the globe is another key developed advantage of KI. KI's recruiting network is unparalleled, and becomes stronger each year as thousands of students, parents, agents, government sponsors, high schools, and other sources of students receive a quality experience from one of our KI programs. While the quality of our programs is the driver, KI's ability to utilize its extensive, multi-channel recruitment network to source a diverse and qualified population of students, and route them to the appropriate program in their desired destination, is a critical component of our growth. We are continually expanding both our student sourcing network and our educational destinations, and each time we do so we strengthen the entire flywheel.

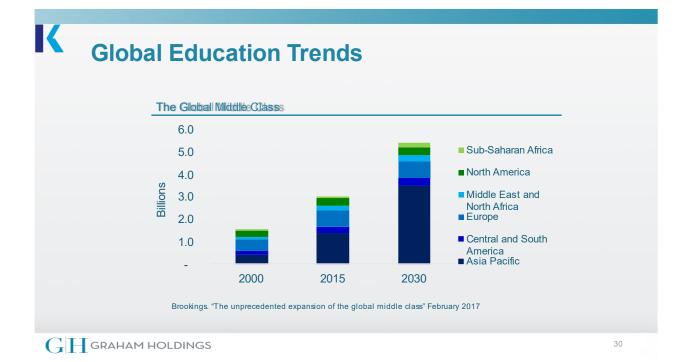


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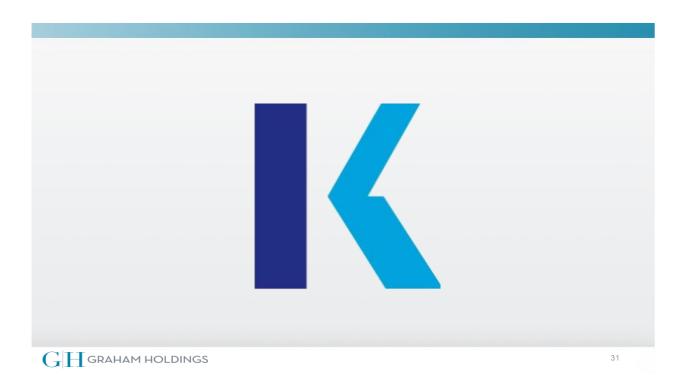
All of the elements I've highlighted are critical - but none of them would enable a sustaining business if Kaplan wasn't laser-focused on the quality of our products and services. In this respect I think our early foundation in test prep, where learning outcomes are all that matters, has served us well: in a world of education companies that come and go, we've thrived for 85 years because we're focused on the results our students and customers seek. This means academic outcomes, pastoral care, customer service, and more. Our partners, students, and regulatory authorities tell us regularly they greatly value what we do and how we do it. Part of that stems from our internal cadence of formal, structured reviews, not just of financial performance, but regular sessions on academic progress, on customer outcomes and satisfaction, on regulatory compliance, on employee engagement and more. We take these very seriously, and they are vital contributors to excellent customer experiences and are core to our long-term success.



I obviously feel great about the prospects of our Kaplan International businesses, and I'm quite proud of the management team and all of KI's team members for the quality of outcomes they deliver for students, partners and shareholders. Six of our seven units posted first quarter volume growth of at least 10% -- some a good bit more than that -- and the seventh is on track for growth for the year. Now, it's true the pandemic's effects were not entirely behind us in Q1 of 2022, so the baselines are not all normal, but we're optimistic about the year.



More importantly, the future of higher education is largely global. The US has seen a decadelong decline in college enrollment, with demographics suggesting that will continue for at least a decade to come. That means less competition for entry to US institutions, but more competition by institutions for students. The rest of the world, meanwhile, is looking at a dramatic surge in higher education demand, with projected growth of hundreds of millions of students in tertiary education worldwide over the next 15 years, mostly in Asia. That's far more than existing universities can handle using traditional models. Universities will be operating in a world of borderless competition for students. While any global business, no matter how diversified and well run, will be subject to periodic geopolitical shocks or a global health crisis disruption, we believe there are very few education organizations – if any – that are as well positioned as Kaplan to maximize the opportunities ahead, given our capabilities and our global institutional and student relationships.



Tim, back to you.

#### **GRAHAM HOLDINGS COMPANY – ANNUAL MEETING**

May 4, 2023



Thanks, Andy. I hope you now have a greater sense of appreciation for the great work Andy and his team have done over the last few years, as well as why we think the future at Kaplan is bright.

Before we wrap, I'd like to take a moment to discuss a recent change on the board of Graham Holdings. Many of you have seen that Don has decided to transition to a Chairman Emeritus role at the Company, starting today. Don has held the CEO or Chairman title since 1991 and we're all better off for it. But, he isn't going far, in fact he is literally just moving a seat down the table in the boardroom and will remain on the board. Anne Mulcahy has agreed to become the new Chair of the Company. Many of you either know Anne or know of her successes. In the annual report, Don points out that there is ample material available to understand her career and success at Xerox. I'd second his suggestion to take to Google or YouTube if you have a free moment. Anne has been on our board since 2007 and has seen tremendous evolution of the Company during her tenure. She and I have developed a wonderful partnership and I was so pleased when she agreed to take on the role of Chair.

As many of you know, we have a remarkable Board of Directors. Shareholders are fortunate to benefit from the guidance and oversight they provide. We are lucky to have Don, Anne, and the entirety of the board as resources for the Company.

This concludes my remarks. At this time, we will move to a few business matters and then we will open it up for Q&A.

#### **GRAHAM HOLDINGS COMPANY ANNUAL MEETING**

Non-GAAP Adjustments May 4, 2023



#### **GRAHAM HOLDINGS COMPANY**

Non GAAP Adjustments								\$ in million
						Other	Corporate	
2022	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Businesses	Office	Total
Operating Income (Loss)	\$83	\$202	\$34	\$15	\$35	(\$228)	(\$56)	\$84
Add: Amortization / Impairment	16	5	20	4	-	142	-	188
Add: Depreciation	34	12	9	4	4	9	1	73
Add: Pension Expense	9	4	1	11	0	2	6	33
Adjusted Operating Cash Flow	\$142	\$223	\$65	\$34	\$38	(\$75)	(\$50)	\$378
Capital Expenditures	(47)	(6)	(8)	(3)	(4)	(15)	(0)	(82)
Adjusted Free Cash Flow	\$95	\$217	\$57	\$31	\$35	(\$90)	(\$50)	\$295
						Other	Corporate	
2021	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Businesses	Office	Total
Operating Income (Loss)	\$51	\$149	(\$16)	\$27	\$12	(\$86)	(\$59)	\$77
Add: Amortization / Impairment	19	5	53	3	-	10	-	91
Add: Depreciation	32	14	10	1	2	11	1	71
Add: Pension Expense	9	4	1	1	-	2	6	23
Adjusted Operating Cash Flow	\$111	\$172	\$48	\$32	\$14	(\$63)	(\$52)	\$263
Capital Expenditures	(101)	(7)	(7)	(4)	(31)	(13)	(0)	(163)
Adjusted Free Cash Flow	\$11	\$166	\$41	\$28	(\$17)	(\$76)	(\$52)	\$100
						Other	Corporate	
2020	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Businesses	Office	Total
Operating Income (Loss)	\$12	\$194	\$12	\$26	(\$6)	(\$86)	(\$52)	\$100
Add: Amortization / Impairment	29	5	28	4	7	13	-	87
Add: Depreciation	32	14	10	2	2	14	1	74
Add: Pension Expense	10	3	1	1	-	2	6	23
Adjusted Operating Cash Flow	\$83	\$217	\$52	\$33	\$3	(\$57)	(\$46)	\$284
Capital Expenditures	(34)	(13)	(8)	(2)	(3)	(5)	(0)	(66)
Adjusted Free Cash Flow	\$49	\$204	\$44	\$30	(\$1)	(\$62)	(\$46)	\$218

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#### **GRAHAM HOLDINGS COMPANY**

Non GAAP Adjustments								\$ in million.
2019	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Other Businesses	Corporate Office	Total
Operating Income (Loss)	\$48	\$153	\$20	\$8	\$1	(\$34)	(\$51)	\$145
Add: Amortization / Impairment	16	13	26	6	-	1	-	62
Add: Depreciation	26	13	10	2	2	5	1	59
Add: Pension Expense	10	3	0	0	-	2	5	20
Adjusted Operating Cash Flow	\$100	\$182	\$57	\$17	\$3	(\$26)	(\$45)	\$287
Capital Expenditures	(57)	(19)	(11)	(2)	(1)	(2)	(0)	(94)
Adjusted Free Cash Flow	\$42	\$163	\$46	\$15	\$1	(\$29)	(\$46)	\$193
						Other	Corporate	
Q1 2023	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Businesses	Office	Total
Operating Income (Loss)	\$23	\$29	\$7	\$3	\$11	(\$31)	(\$14)	\$28
Add: Amortization / Impairment	4	1	5	1	-	3	-	15
Add: Depreciation	9	3	2	1	1	3	0	20
Add: Pension Expense	2	1	0	4	0	1	1	9
Adjusted Operating Cash Flow	\$39	\$34	\$15	\$9	\$12	(\$24)	(\$13)	\$72
Capital Expenditures							_	(22)
Adjusted Free Cash Flow								\$49
						Other	Corporate	
Q1 2022	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Businesses	Office	Total
Operating Income (Loss)	\$20	\$40	\$10	\$6	\$7	(\$31)	(\$13)	\$40
Add: Amortization / Impairment	4	1	5	1	-	3	-	15
Add: Depreciation	9	3	2	0	1	4	0	19
Add: Pension Expense	3	1	0	0	0	1	2	6
Adjusted Operating Cash Flow	\$36	\$45	\$18	\$8	\$8	(\$23)	(\$11)	\$80
Capital Expenditures							_	(13)
Adjusted Free Cash Flow								\$67

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#### **GRAHAM HOLDINGS COMPANY**

Non GAAP Adjustments – Kaplan Divis	ions				\$ in million
2022	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total
Operating Income (Loss)	\$72	\$24	\$21	(\$34)	\$83
Add: Amortization / Impairment	-	-	-	16	16
Add: Depreciation	23	4	6	0	34
Add: Pension Expense	0	4	4	1	9
Adjusted Operating Cash Flow	\$96	\$32	\$32	(\$17)	\$142
2021	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total
Operating Income (Loss)	\$33	\$24	\$37	(\$44)	\$51
Add: Amortization / Impairment	-	-	-	19	19
Add: Depreciation	21	4	7	0	32
Add: Pension Expense	0	4	4	1	9
Adjusted Operating Cash Flow	\$55	\$32	\$47	(\$23)	\$111
2020	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total
Operating Income (Loss)	\$15	\$24	\$20	(\$48)	\$12
Add: Amortization / Impairment	-	-	-	29	29
Add: Depreciation	20	3	9	0	32
Add: Pension Expense	0	4	4	1	10
Adjusted Operating Cash Flow	\$35	\$32	\$33	(\$17)	\$83
2019	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total
Operating Income (Loss)	\$42	\$14	\$34	(\$43)	\$48
Add: Amortization / Impairment	-	-	-	16	16
Add: Depreciation	15	3	7	0	26
Add: Pension Expense	0	5	5	1	10
Adjusted Operating Cash Flow	\$58	\$21	\$46	(\$26)	\$100

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#### **GRAHAM HOLDINGS COMPANY**

Non GAAP Adjustments – Kaplan Divis	iions				\$ in millions
Q1 2023	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total
Operating Income (Loss)	\$21	\$7	\$4	(\$9)	\$23
Add: Amortization / Impairment	-	-	-	4	4
Add: Depreciation	6	1	2	0	9
Add: Pension Expense	0	1	1	0	2
Adjusted Operating Cash Flow	\$28	\$9	\$6	(\$4)	\$39
Q1 2022	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total
Operating Income (Loss)	\$21	\$5	\$3	(\$9)	\$20
Add: Amortization / Impairment	-	-	-	4	4
Add: Depreciation	6	1	2	0	9
Add: Pension Expense	0	1	1	0	3
Adjusted Operating Cash Flow	\$26	\$7	\$6	(\$4)	\$36

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#### Q&A



#### **GRAHAM HOLDINGS COMPANY – ANNUAL MEETING**

May 4, 2023

