Investor Day
December 10, 2024
Remarks by
Timothy J. O’Shaughnessy
Chief Executive Officer
Graham Holdings Company
and
Wallace R. Cooney
Chief Financial Officer
Graham Holdings Company

GRAHAM HOLDINGS COMPANY – INVESTOR DAY

December 10, 2024

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 2023 Annual Report to Stockholders, and the Forms 10-Q for the first, second and third quarter are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995.

Forward-looking statements are based on expectations, forecasts, and assumptions by the Company's management and involve a number of risks, uncertainties, and other factors that could cause actual results to differ from those stated, including, without limitation, comments about expectations related to acquisitions or dispositions or related business activities, the Company's business strategies and objectives, the prospects for growth in the Company's various business operations, the Company's future financial performance, and the risks and uncertainties described in Item 1A of the Company's Annual Report on Form 10-K. 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 forward-looking 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 Forms 10-Q for the first, second and third quarter.

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.

GH GRAHAM HOLDINGS

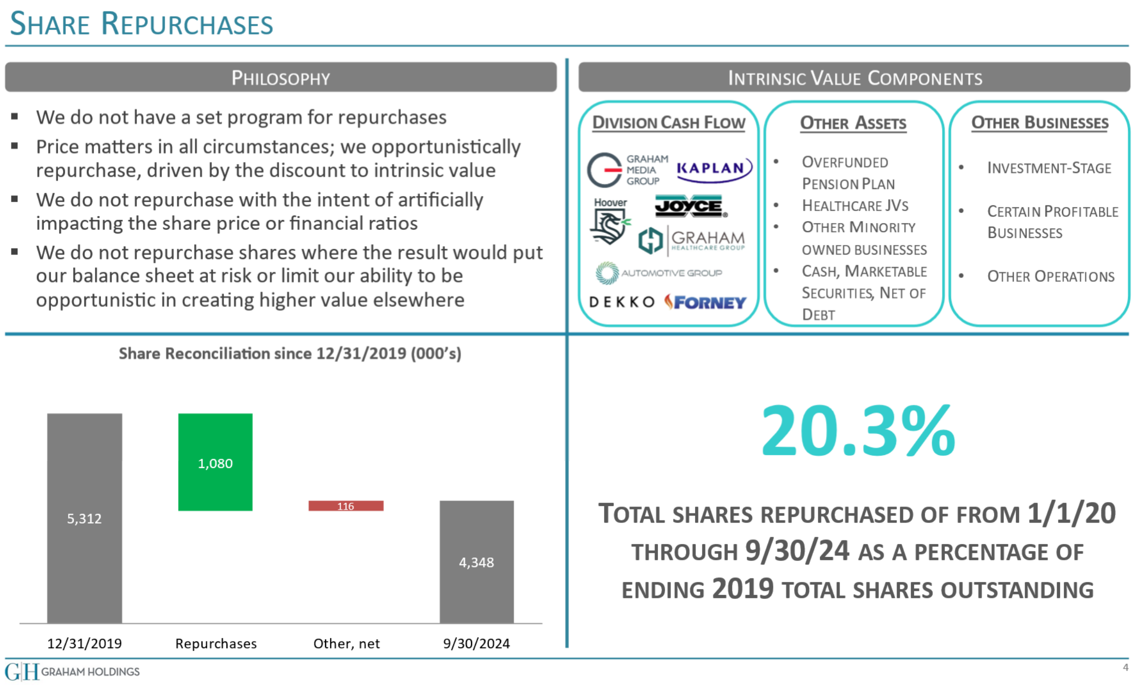
Hello and welcome to our 2024 Graham Holdings Company Investor Day. Our agenda will be as follows:

- A general update on operations and share repurchases;
- Wally Cooney, our CFO, will provide an update on our pension plan;
- A question and answer session for as long as time permits. We've received several questions in advance and would like to remind you that questions can also be submitted real time through the presentation portal.

Let's start with a first principles review of how we run Graham Holdings.

Our high-level philosophy remains largely unchanged. Our goal and north star is to grow our cash flow on a per share basis over the long term, including through our holdings of non-consolidated investments.

We also place a high premium on returning capital to shareholders when it makes sense relative to other available opportunities. This has happened in the form of a quarterly dividend, which has, and is likely to continue to increase over the years; and, via share repurchases, something that has happened more often in recent years.



I'd like to discuss our share repurchase program. Graham Holdings does not have a set repurchase cadence, nor will management likely ever propose that we do so. We only buy back shares when: 1) doing so does not put our balance sheet at risk or severely limit our balance sheet flexibility, 2) internal investment opportunities that help grow and strengthen the moats of our businesses and grow long-term free cash flow have been funded, and 3) when we can acquire shares at a material discount to our view of intrinsic value.

Over the last several years, all of those conditions have been met. There are no guarantees they will continue to be met in the future, and there will almost certainly be extended periods where this will not be the case. We will continue to evaluate share repurchases based on the above listed parameters.

Since 2020, share repurchases have been a significant use of capital at the Company. We have spent $580 million on repurchases and acquired more than 1,000,000 shares through September 30, 2024. A shareholder who owned part of Graham Holdings on January 1, 2020 would have seen their ownership stake in the Company grow by approximately 25% without ponying up any additional cash to achieve that increase.

With the recent appreciation in the share price of Graham Holdings, the return profile of those repurchases looks increasingly attractive. Based on the stock price at the end of November, the returns range from a 14% annualized return to a 37% annualized return, depending on the year of comparison (excluding the impact of dividends and excise taxes). Most would consider these good short-term to mid-term results; but we know in the long term, the scorecard of the repurchases will be determined much more by the next fifteen years rather than the previous five.

Graham Holdings Financial Results

$ in millions

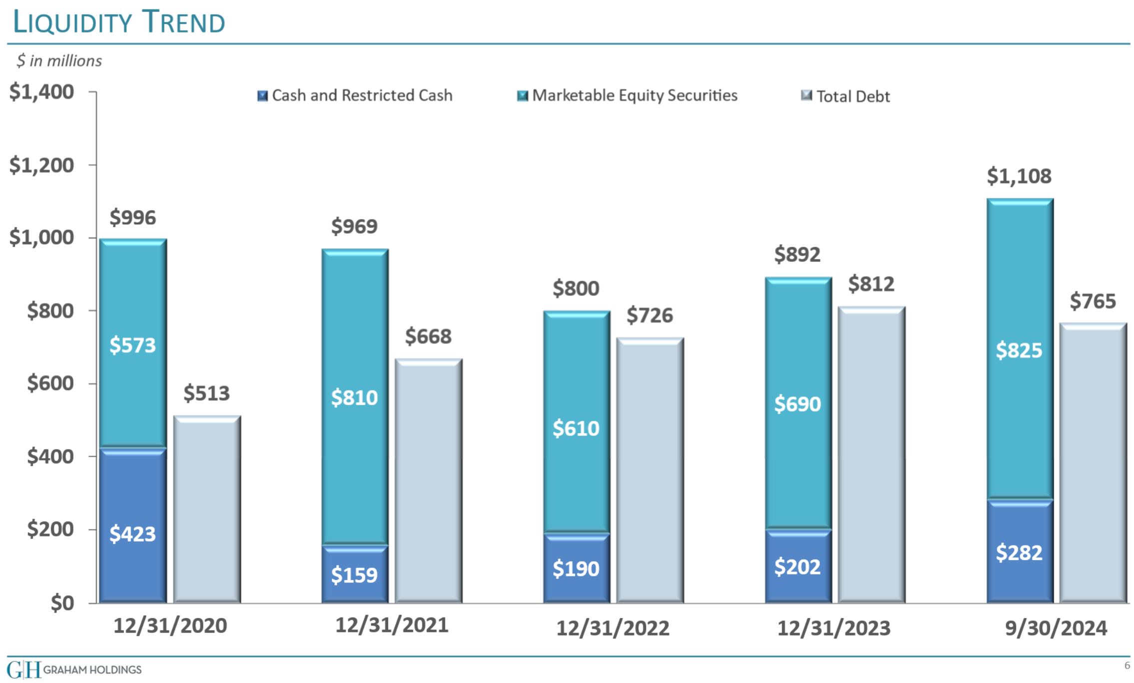
Revenues	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Education	$1,361	$1,428	$1,588	$1,192	$1,284	*8%*
Broadcasting	494	536	472	348	374	*8%*
Manufacturing	458	487	448	344	301	*(12%)*
Healthcare	223	326	459	332	431	*30%*
Automotive	327	734	1,080	765	902	*18%*
Other Businesses, Corporate and Eliminations	322	414	368	268	253	*(5%)*
Total Revenues	**$3,186**	**$3,924**	**$4,415**	**$3,248**	**$3,545**	***9%***

Adjusted Operating Cash Flow[1]	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Education	$111	$142	$166	$130	$149	*15%*
Broadcasting	172	223	155	110	140	*28%*
Manufacturing	48	65	58	47	30	*(35%)*
Healthcare	32	34	47	34	54	*57%*
Automotive	14	38	44	32	34	*6%*
Other Businesses	(63)	(75)	(81)	(61)	(60)	*1%*
Corporate Office	(52)	(50)	(51)	(37)	(40)	*(9%)*
Total Adjusted Operating Cash Flow[1]	**$263**	**$378**	**$338**	**$255**	**$307**	***20%***
Capital Expenditures	(163)	(82)	(107)	(72)	(66)	*8%*
Adjusted Free Cash Flow[1]	**$100**	**$295**	**$231**	**$184**	**$241**	***31%***
Total Shares Outstanding (000's)	*4,906*	*4,787*	*4,479*	*4,579*	*4,348*	*(5%)*

GH GRAHAM HOLDINGS

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

Operationally, year to date results have been more than adequate at most units. Through Q3, we've generated $307 million in adjusted operating cash flow, up $52 million from the prior year. The improved results have been driven by Kaplan, Graham Healthcare Group, and political advertising at Graham Media Group. Results were partially offset by declines at our manufacturing segment, which saw several businesses in down-cycle markets.



The Q3 balance sheet snapshot shows a cash and securities balance of $1.1 billion against $765 million in debt, for a net position of approximately $343 million. We continue to believe that we have sufficient balance sheet flexibility.

These numbers have all previously been disclosed in either our earnings releases or our 10-Q, so I'd like to spend more time discussing our current views on strategy at several of our major businesses, instead of doing a more detailed walkthrough of consolidated numbers.

Broadcasting Segment

$ in millions

	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Revenue	$494	$536	$472	$348	$374	*8%*
Adjusted Operating Cash Flow[1]	$172	$223	$155	$110	$140	*28%*
Capital Expenditures	(7)	(6)	(9)	(5)	(4)	*14%*
Adjusted Free Cash Flow[1]	$166	$217	$146	$105	$136	*30%*

Houston, TX
DMA: 6

Expect more.

San Antonio, TX
DMA: 31

Roanoke, VA
DMA: 70

Detroit, MI
DMA: 14

Jacksonville, FL
DMA: 41
Independent

GRAHAM DIGITAL

Detroit, MI

Orlando, FL
DMA: 15

Jacksonville, FL
DMA: 41

SOCIAL NEWS DESK

Atlanta, GA

Source: 2024/2025 Local Television Market Universe Estimates, the Nielsen Company, based on television homes in DMA

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

I'll start with local broadcast by highlighting that the strong political season we expected has materialized, with Adjusted Operating Cash Flow up 28% for the first nine months of the year; political revenues in Q4 further exceeded our expectations. Our approach at Graham Media Group (GMG) has not materially changed. We are taking the cash flow generated from the stations and reallocating it into other opportunities. While we are doing this, Catherine Badalamente, as discussed at last year's Investor Day, is attempting to rebuild the plane in the air, while maintaining acceptable levels of altitude.

The task to maintain this altitude is formidable and not without turbulence.

Here is what we believe to currently be true about the industry:

Challenges:

- The linear ecosystem continues to erode. MVPD and satellite subscribers have been declining at mid-high single digit rates year over year, causing net retransmission revenue to decrease and audiences to erode.
- Virtual MVPD providers are a partial offset to the linear ecosystem erosion, but with inferior economics and lower viewership.
- The average age of a local news viewer continues to trend up.
- Increased advertising options exist for national advertisers, particularly via Connected TV and programmatic channels, making direct buys less likely.
- The product has not evolved in line with society and in most major markets, is undifferentiated from the competition.

Strengths:

- Local broadcast has community and convening power that continues to be very powerful. The ability to reach local audiences at scale still exists.
- Likely voters remain over-indexed to local TV, providing continued opportunities for political advertising.
- The brand awareness of stations in communities is enormous.
- Local advertisers continue to have success in driving brand reach and sales on linear, streaming, and digital.
- Competition in other local mediums, predominantly newspaper and radio, continues to weaken.

Catherine and the team at GMG are leveraging our strengths and assets to build and test new models attempting to find the next chapter of a sustainable, local media business model. One item that would help: the FCC currently has broadcast ownership rules that prohibit a single owner from owning more than one of the top four affiliates in a local market. The origins of this rule date back to 1941 while the current version of the rule, in substance, was adopted in 1999.

I imagine most attendees today are accessing and listening to today's event via some form of internet connection. In 1999, internet household penetration was approximately 26%. It's fair to say that times have changed in the last 25 years in how people access and consume media and content.

The elimination of the "top 4 rule" would allow for local broadcasters to create healthier operations via mergers, leaving bigger operations that could better serve the community. The additional scale would also provide more resources to compete against national competitors who do not use spectrum to deliver content. This would insulate local news gathering resources and provide more runway to explore future models. But it is by no means a panacea; the future has not yet been invented for the industry. To ensure this additional runway is put to good use, the FCC could consider capitalization rules that would limit the amount of leverage that a spectrum licensee could take on if they own more than one of the top four stations. This would ensure that capital is available to truly innovate for the future.

Removal of the “top 4 rule” does not solve the industry problems, but it would go a long way in helping to provide the opportunity to continue to serve the communities in which local broadcast operates.

Education Division

$ in millions

Revenues	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Kaplan international	$727	$816	$967	$715	$814	*14%*
Higher education	322	310	327	251	247	*(1%)*
Supplemental education	309	302	293	227	221	*(2%)*
Kaplan corporate and other	3	(0)	1	0	2	*NA*
Total Revenues	**$1,361**	**$1,428**	**$1,588**	**$1,192**	**$1,284**	***8%***

Adjusted Operating Cash Flow[1]	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Kaplan international	$55	$96	$116	$85	$105	*23%*
Higher education	33	33	47	40	39	*(1%)*
Supplemental education	47	32	32	24	30	*24%*
Kaplan corporate and other	(24)	(18)	(29)	(19)	(25)	*(30%)*
Total Adjusted Operating Cash Flow[1]	**$111**	**$142**	**$166**	**$130**	**$149**	***15%***
Capital Expenditures	(101)	(47)	(37)	(24)	(18)	*21%*
Adjusted Free Cash Flow[1]	**$11**	**$95**	**$129**	**$106**	**$131**	***23%***

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

Kaplan is a great example of a business that has successfully rebuilt itself on the fly. Andy Rosen and his team have constantly evolved Kaplan's business model in line with changing modalities, regulations, and student needs. Academic outcomes have always been at the heart of the Kaplan culture. Because of that, over the course of a generation Kaplan has been able to adapt from a physical center-based test prep business to a scaled global business, with an increasing focus as a service provider to higher education institutions worldwide.

Results year to date have shown continued progress in building the incremental earning power in Kaplan's business that we strive to achieve each year. At the Annual Meeting, Andy spoke a bit about the trends that drive the Kaplan strategy, with a particular focus on three specific areas. I'll repeat them here:

- First, the number of U.S. high school graduates will decline. It's easy to predict the number of high school seniors we'll have in ten years; assuming immigration or mortality don't change dramatically, you have a pretty good basis for calculation in the number of second graders we have now. Since birth cohorts have been declining for many years, we can be fairly confident that today's U.S. kindergarteners will graduate high school alongside about 3.5 million others, down from 3.9 million today. In addition, over the last 7 years, the percentage of U.S. high school graduates who immediately went on to attend college has dropped from 70% to 61%. For parents of young children who are already thinking about where their kids will go to college, this is good news, as there will be less competition for space. For a test prep company, the reduction in both numbers and competition is not great news, but it's at least as bad for many universities that will have difficulty filling their classrooms and dormitories. We believe that will create opportunities for organizations that can help fill those classrooms with, say, international students, or promote specific universities to high school students, or enable alternative revenue and delivery options like online programs.
- Second, international higher education students will surge. From 2020 through 2030, it is expected that more than one billion people will be added to the global middle class, mostly in Asia and Africa. Global tertiary education enrollment will grow by about 160 million students over the same period. Yet there are too few local, high-quality universities to meet the demand in countries around the world,

which will drive some of those students to seek their higher education in other countries.

- Third, English-speaking countries are the first choice for transnational students. Approximately 50% of transnational students are captured by the “Big Four” English-speaking countries, which include the United States, the United Kingdom, Australia, and Canada. An estimated 80% of transnational education tuition dollars are captured by the “Big Four.” Again, Asia is a driving source of transnational students – with China and India making up a large portion.

We will continue to build our global recruitment network and product suite to meet these needs. This will largely occur via organic initiatives, but it is possible we will, from time to time, find a business that would help us build out our moats faster and increase earning power.

Lastly, Kaplan continues to invest heavily in leveraging AI and LLM models to improve its product offerings, as well as the efficiency of our operations. There are certainly both opportunities and threats that come from AI. However, the decades of human experience combined with the data from billions of student learning interactions should provide us with a leg up as we leverage these new tools.

Healthcare Segment

$ in millions

Consolidated Units	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Revenue	$223	$326	$459	$332	$431	*30%*
Adjusted Operating Cash Flow[1]	$32	$34	$47	$34	$54	*57%*
Capital Expenditures	(4)	(3)	(13)	(10)	(9)	*9%*
Adjusted Free Cash Flow[1]	$28	$31	$34	$25	$45	*83%*

Joint Ventures	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Equity in Earnings of Affiliates	$10	$8	$10	$7	$10	*48%*

Wholly-Owned HH/HP
100% Ownership

Other Consolidated Businesses
Equity Stakes Between 50%+ to 100%

Joint Ventures (HH/HP)
Ownership of 50% or Less

[1] Non-GAAP measure– see reconciliation in appendix
Note: the sum of certain amounts may not equal the total due to rounding
HH = Home Health HP = Hospice

2024 has been a spectacular year at Graham Healthcare Group. Adjusted operating cash flow has increased year to date from $34 million to $54 million. Our share of joint venture income generated another $10 million year to date.

This growth was led by improvements at our Home Health operations and CSI Pharmacy, our home infusion business. We believe our healthcare operations should continue to grow organically in future years and can become much bigger than what you see in 2024.

Mandatorily Redeemable Noncontrolling Interest

Significant charges recorded due to underlying valuation of assets owned by Graham Healthcare Group

- For the nine months ended September 30, 2024 the Company recorded interest expense of $85.1 million to adjust the fair value of the mandatorily redeemable noncontrolling interest (MRNCI)
  - These charges were based on the fair value of the underlying subsidiaries owned by GHC One, LLC (GHC One) and GHC Two, LLC (GHC Two), after taking into account any debt and other noncontrolling interests of their respective subsidiary investments
- A material portion of the recorded interest expense attributable to MRNCI is a direct result of the increase in valuation of CSI Pharmacy
  - It is possible for further increases to be recorded in future periods
- The MRNCI balance as of Q3 2024 is approximately $125.5 million, largely attributable to GHC One, which holds the investment in CSI Pharmacy
  - As a result, the Company expects to pay the amount attributable to GHC One upon its scheduled dissolution in March 2026

Clarus SKINCLIQUE CSI PHARMACY Clinical Specialty Infusions, LLC. IMPACT MEDICAL Allergy, Asthma & Immunology SURPASS BEHAVIORAL HEALTH

GH GRAHAM HOLDINGS 10

It is important to note that we do not currently own 100% of CSI Pharmacy. We originally purchased the majority of the equity of the business. Separately, we have a “mandatorily redeemable noncontrolling interest” (MRNCI) related to the ownership portion of a group of minority shareholders based upon an agreed set of terms. Changes in the MRNCI are recorded as interest expense, and subsequently reflected as a liability on the balance sheet. This is a real liability, and you should treat it as one. This arrangement exists in several businesses, although the lion’s share of the balance is tied to CSI Pharmacy.

Through the first nine months of the year, we have recorded expense of $85.1 million to adjust the fair value of the MRNCI, which has increased our total balance to $125.5 million. The vast majority of this balance is scheduled to be redeemed in March of 2026. In other words, we are currently scheduled to buy out an additional portion of the minority interest of CSI we do not currently own in about 16 months and it is most of the current $125.5 million balance. We disclosed the details of this arrangement in several filings, the most recent of which was in Q3.

The MRNCI balance will likely change between now and March 2026. In fact, there is a good chance that if CSI continues to grow and perform well, it will increase. The more valuable CSI becomes, the more it will cost us to buy out this MRNCI liability. In fact, if this were to happen, it would hurt our reported net income and it would reduce our reported book value.

But this would be a good thing. Why? Because it means the much larger majority ownership stake we already DO own would also have increased substantially in value. Due to accounting rules, our mandatorily redeemable minority stake needs to be adjusted in value regularly, whereas our majority stake lives on our balance sheet at cost and its value cannot be adjusted upwards. We don't make the accounting rules, but we do, from time to time, find ourselves in a spot where explanations of oddities are required.

Most of our service lines focus on providing in-home care and we expect that to be our primary focus in the future as well. Our strategy starts with continuously looking to increase the quality of our care and outcomes. As we are successful with this, we should be able to further penetrate our existing service lines organically, while opportunistically looking at bolt-on M&A opportunities. Additionally, we expect we may add new service lines that can leverage our operating capabilities and/or geographic footprint, primarily via acquisition.

The services we provide are a win for society. In-home care often provides better care outcomes in a lower cost of care setting than an acute care facility. Patient satisfaction is almost always higher when they receive care at home.

We have an operating engine that can handle more cylinders. We are actively searching for new opportunities to deploy capital within our healthcare services segment in the coming years.

Manufacturing and Automotive

$ in millions

Manufacturing Segment	**2021**	**2022**	**2023**	**Q3 '23 YTD**	**Q3 '24 YTD**	***% Change***
Revenue	$458	$487	$448	$344	$301	*(12%)*
Adjusted Operating Cash Flow[1]	$48	$65	$58	$47	$30	*(35%)*
Capital Expenditures	(7)	(8)	(23)	(15)	(12)	*19%*
Adjusted Free Cash Flow[1]	$41	$57	$34	$32	$18	*(43%)*

Automotive Segment	**2021**	**2022**	**2023**	**Q3 '23 YTD**	**Q3 '24 YTD**	***% Change***
Revenue	$327	$734	$1,080	$765	$902	*18%*
Adjusted Operating Cash Flow[1]	$14	$38	$44	$32	$34	*6%*
Capital Expenditures	(31)	(4)	(10)	(6)	(3)	*50%*
Adjusted Free Cash Flow[1]	($17)	$35	$34	$26	$31	*20%*

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

My update on our manufacturing and automotive segments will be brief. Our approach is simple: manage the businesses well, organically try to grow our market share, and seek out the occasional bolt-on acquisition, particularly at our automotive dealerships. These segments produce cash that can often be redeployed elsewhere within the Company or returned to shareholders. While we have a few businesses in our manufacturing segment experiencing the downside of cyclicality, we are delighted with our managers and their ability to continue to produce solid returns on behalf of shareholders.

Other Businesses

$ in millions

	2021	2022	2023	Q3 '23 YTD	Q3 '24 YTD	*% Change*
Specialty Revenue	$83	$126	$139	$101	$107	*6%*
Retail Revenue	131	164	124	90	77	*(14%)*
Media Revenue	111	126	106	78	70	*(11%)*
Total Revenues	$324	$416	$370	$269	$254	*(6%)*
Adjusted Operating Cash Flow[1]	($63)	($75)	($81)	($61)	($60)	*1%*
Capital Expenditures	(13)	(15)	(15)	(12)	(17)	*(38%)*
Adjusted Free Cash Flow[1]	($76)	($90)	($96)	($73)	($77)	*(5%)*

Specialty

Clyde's Restaurant Group
decile
Supporting Cast

Retail

Framebridge
Saatchi Art
society6

Media

World of Good
Code3
Slate
FP
City Cast

[1] *Non-GAAP measure– see reconciliation in appendix*
Note: the sum of certain amounts may not equal the total due to rounding

Now, let's take a moment to discuss our other businesses. In aggregate, I expected more progress from this group in 2024 than materialized. At most of the units, results have been in line with expectations, but not all. I'll first start with what's going well.

- Clyde's Restaurant Group (CRG):

  Our restaurant group continues to provide great experiences for customers and create brand experiences that meet the current consumer moment. Additionally, we recently opened two new locations in the second half of the year: the Rye Street Tavern on Baltimore Harbor, and Cordelia Fishbar in Washington DC's Union Market neighborhood, which opened in mid-November. Both restaurants are through their pre-opening and into their ramp up periods. We expect they will be meaningful contributors to the group.

- Framebridge:

  We are seeing strong demand signals for our offerings at Framebridge. Our retail rollout has accelerated, and we expect to close 2024 with 32 stores, up from 22 at the beginning of the year. Additionally, our recent launch of tabletop frames has added a new product line to our offerings. We are seeing strong signs of customer interest in our tabletop collection, particularly as a "gift and go" option. A customer can walk into any Framebridge store and AirDrop a digital photo to an associate's iPad. The associate will digitally crop and touch up the photo on the spot, then print and frame the photo in the store before sending you on your way with the now framed photo nicely packaged in a gift box, all in just a few minutes. You never need to show up empty-handed again. As we head into 2025, Framebridge will continue to use its growing scale to improve its unit level margins, as well as open another 20-25 stores.

- Saatchi Art:

  Our original art marketplace continues to grow well. When the housing market begins to unthaw, we are optimistic we will see further increased demand as refreshing and/or filling walls with art tends to be correlated with a change in residence.

What's not going well:

- The biggest surprise of the year was a large decrease in search traffic to many of our digital media brands after Google's March search update. Notably, this update began to surface a generative AI widget above many of the search results. I am certain many of you have noticed this in your own searches. This update, combined with the new AI results, led to a serious traffic decline at several brands and units. World of Good brands was most significantly, but not exclusively impacted. In a multi-variant world, it's hard to calculate the precise impact of these search changes, but we believe this development led to a $10-20 million increase in operating losses for 2024 relative to our expectations heading into the year. The decrease was so dramatic for a few brands, that further declines would not be impactful because the base is so much smaller.

- Brand advertising spend has been below overall ad industry projections. Ad spending was forecasted to grow at higher rates in 2024 than have materialized. Correspondingly, our media and agency businesses have had more tempered results.
- Society6 continues to see headwinds in the home décor market. Significant reductions in the cost base have helped, but we need to return to revenue growth soon to see a sustainable business.

As discussed previously, this group always evolves, and we expect it to continue to do so. 2025 will continue to be an investment year for other businesses, although less so due to possible portfolio management, reduced pre-opening costs at Clyde's Restaurant Group, and improved results at many units. We will continue to monitor loss-making businesses with a view of risk-adjusted returns on capital.

GRAHAM HOLDINGS

Pension Plan Update

We've had some activity within our pension fund, most notably an annuity transaction that took place in October of this year. I've asked Wally Cooney, our CFO, to update you on how we think about managing the fund in ways that we believe benefit current pensioners, retirees, and the Company. Over to you Wally.

Thanks Tim. Today, I'll provide an update on the current status of the Company's pension plan, elaborate on recent activities, and share thoughts on opportunities for the future.

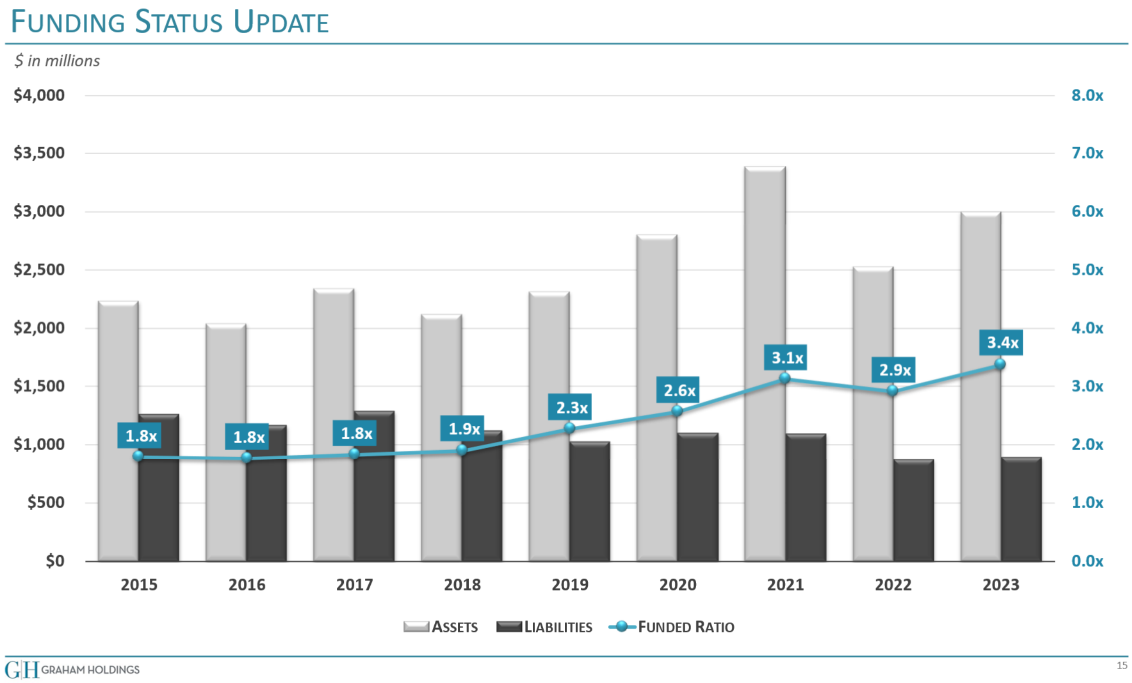
Pension Plan Fundamentals

- Pension funds are not assets of the Company. Pension funds are held in trust for the benefit of employees, former employees, and retirees.
- Plan administrators have fiduciary obligations to the plan and its participants
- External legal counsel and actuarial professionals advise the Company on numerous pension matters
- ERISA, DOL, and IRS regulations must be carefully adhered to and monitored

As a refresher from previous discussions on this topic, it is important to highlight certain fundamentals with respect to the Company's pension plan which are included in this slide.

The Company's pension plan and its overfunded surplus is of significant long-term value to the Company, its employees and retirees. It has funded meaningful pension benefits for thousands of employees in the past and present, with the expectation that robust pension benefits will continue to be funded in the future that provide the Company with a strategic advantage in recruiting and retaining key talent across its business lines. The plan has also funded thousands of employees with generous severance and early retirement pension funded benefits, enabling our business units to make cost reductions as needed without impacting the corporate treasury. The plan's substantially overfunded status leaves us with significant optionality and flexibility in exploring, designing and implementing programs, plans and possible transactions to effectively utilize the plan for the benefit of current and future employees and the Company.

Over the last few years, we have continued to look for ways to further derisk the pension plan and to utilize the plan to provide current and future employees, and retirees, with meaningful and attractive employee benefits that are also beneficial to the Company.



Let me start with a high-level overview of the Company's pension funding status in recent years. Since the end of 2020, the pension plan funding ratio went from approximately 2.6 times overfunded to 3.4 times overfunded at the end of our last fiscal year. At December 31, 2023, pension plan assets totaled $3.0 billion and the Company's pension benefit obligation was $892 million. This is not a new phenomenon as the pension plan has been in an overfunded status for many years. A reminder about our pension history – the Company has not made any meaningful cash contribution to its pension fund since the 1980s, which means that for several decades, the Company's pension benefits and related costs have been fully funded by the pension assets and, importantly, not out of the corporate treasury.

So what has the Company done with the pension plan over the last few years?

Recent Activity

Separation Incentive Program (SIP) and Voluntary Retirement Incentive Program (VRIP) activity:

$ in millions	Education	Broadcasting	Manufacturing	Other Businesses	Corporate	Total
2020	$13	–	–	$1	–	**$14**
2021	–	–	1	–	–	**1**
2022	4	–	–	–	–	**4**
2023	0	1	–	9	–	**10**
9/30/24 YTD	3	14	0	3	1	**20**
Total	**$20**	**$15**	**$1**	**$13**	**$1**	**$49**

- Changes made to the existing plan
  - As of January 1, 2024, amended the pension plan to provide employees with an increased (or new) pension benefit
  - Added new units to the plan, including Framebridge, Hoover, and the former Leaf businesses
    - ✓ As a result of these changes, the Company's cashbased matching contribution to certain of its 401(k) Savings Plans was eliminated
  - Provided education and comprehensive information to employees relating to the value of their retirement benefits
  - While a successful pilot program, GHG stopped offering its retention credit program to new employees as of April 1, 2024
    - ✓ Starting January 1, 2025, GHG is enhancing existing pension benefits
- In addition to pension benefits, the Company maintains 401(k) plans with high levels of employee participation

 Note: amounts may not foot due to rounding

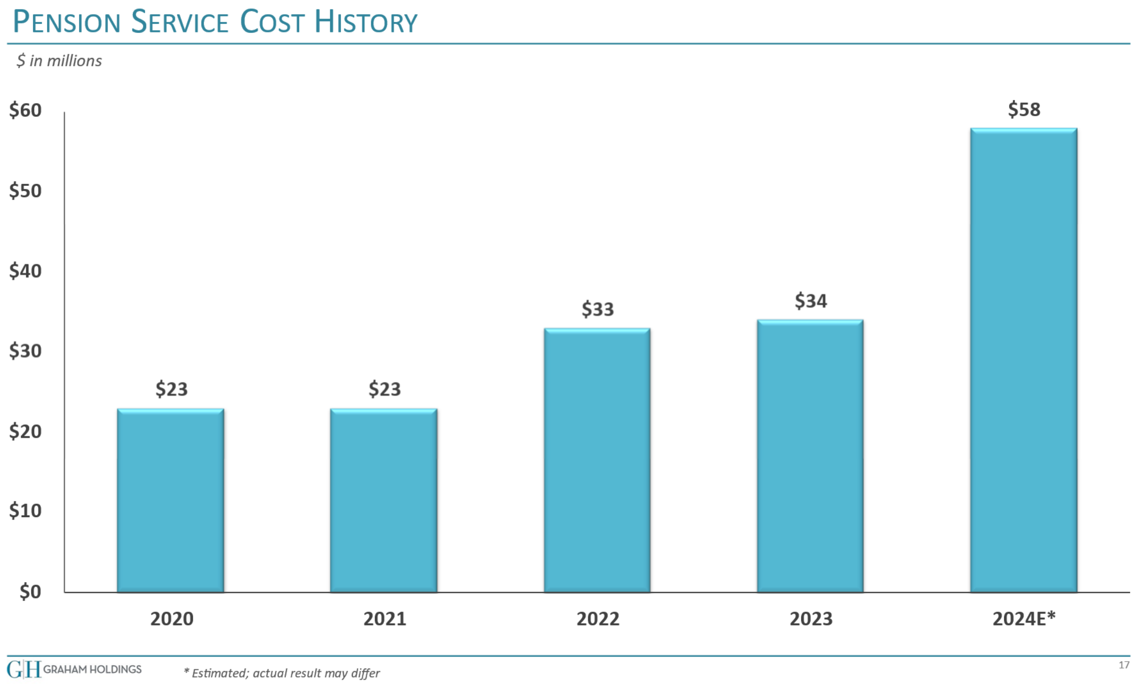
First, we have implemented multiple Separation Incentive Programs and Voluntary Retirement Incentive Programs across our various businesses. These programs were put in place to reduce ongoing costs at certain business units, leveraging the assets of the plan to fund early retirement and severance benefits related to headcount reductions. From 2020 through the end of the third quarter of 2024, $49 million in early retirement and severance costs have been funded by the assets of the pension plan at Kaplan, Graham Media Group, Corporate, Dekko and Forney, as well as at Code3, Slate, Decile, Framebridge and the former Leaf businesses. Providing separation benefits in the form of noncash pension credits allows us to provide meaningful benefits, while also being mindful of the business needs of our operating companies.

Second, the Company modified certain elements of the pension plan as follows:

- As of January 1, 2024 we increased pension benefits for many current plan participants – this generally ranges from a 4% to 10% annual salary contribution amount, depending on business unit and years of service, subject to various plan limitations.
- A new defined benefit pension offering was added for employees of Framebridge and the former Leaf businesses at the beginning of the year, and as of July 1, Hoover joined as well.
- The Company provides education and online access to pension plan participants related to the growing value of their pension benefits. Pension contributions and interest credits are now posted monthly to participants' accounts, with online access and detailed transaction history alongside their 401(k) balances, all of which is now integrated into our retirement portal, providing participants with a holistic view of their consolidated retirement benefits.
- Finally, in looking for ways to offer pension benefits as a recruiting and retention tool, you may recall that we rolled out the Pension Retention Credit Program at Graham Healthcare Group in 2022. With nursing and clinical field staff shortages across GHG's operations at the time, this pilot program offered a pension funded retention credit of up to $50,000 per employee, cliff vested after three years of continuous employment. GHG is no longer offering this program to new employees effective April 1, 2024 due to changes in the labor environment. Additionally, GHG recently announced increased pension benefits to most of its employees effective January 1, 2025, with a higher annual salary contribution amount. Overall, the GHG pilot program was successful; we learned a lot about

> how to plan, analyze and track benefits and costs from this innovative retention program; and we will explore opportunities to implement additional programs like this in the future to the extent there is a strong business case.

These increased pension benefits were partially offset by the elimination of Company matching contributions for certain defined contribution benefit plans, which were previously funded from our corporate treasury. The Company’s 401(k) plans also continue to be an important retirement savings vehicle for our employees, with high levels of participation and automatic enrollment for the majority of new eligible employees.

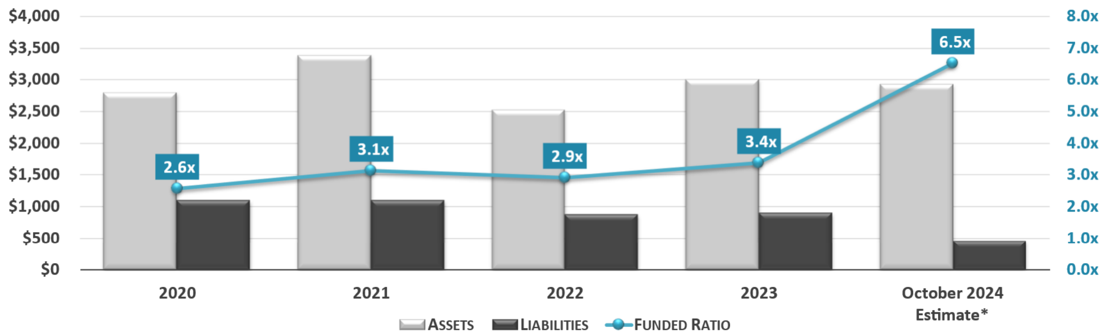


Our strategic shift to enhance and increase pension funded retirement benefits, while maintaining 401(k) plans, provides employees with compelling retirement benefits and retirement savings opportunities, and minimizes retirement benefits funding out of the corporate treasury. Overall, pension service cost for the five-year period from 2020 through the end of fiscal 2024, is estimated at $170 million. While pension service cost is an operating expense, it is a noncash charge, as these benefits are not funded from operations, but rather from the overfunded pension plan. As a result, the Company's operating cash flows benefit from increased amounts of noncash pension expense.

Annuity Transaction

Bolsters the relative financial strength and security of the pension plan *Chart below in $ millions, except ratios*

- In Q4 2024, the Company purchased an irrevocable group annuity contract for $461.3 million using assets of the Company's pension plan
  - Settles $457.9 million of the outstanding defined benefit pension obligation for approximately 1,850 beneficiaries
  - No changes to the amount, timing, or form of monthly retirement benefit payments



- The Company expects to record a non-cash, pre-tax settlement accounting gain of approximately $650 million in Q4 2024 related to a portion of the unrealized pension gain currently in accumulated other comprehensive income

GH GRAHAM HOLDINGS * Estimated; actual result may differ 18

Other more recent activities include the Company closing on a large group annuity pension derisking transaction in October 2024, similar to a transaction we completed in the fourth quarter of 2019. This transaction involved the purchase of an irrevocable group annuity contract from an insurance company for $461 million, which was paid from pension assets, to settle $458 million of outstanding pension obligations to certain retirees and beneficiaries.

We believe this group annuity transaction with a highly-rated insurance company is good for both retirees and for the Company. We are proud to continue to honor our commitment to retirees and beneficiaries of the plan; the insurance company is now required to pay and administer retirement benefits owed to approximately 1,850 retirees and their beneficiaries, with no change to the amount, timing or form of monthly retirement benefit payments. With recent favorable pension asset returns and continued elevated interest rates in 2024, we believe the timing of the transaction was beneficial for the Company as well and the pension plan funded ratio has now improved to an estimated 6.5 times overfunded as of October 2024. As a result, we have increased overall flexibility for the pension plan and created opportunities for improved efficiency and a reduction in related costs to administer the plan.

As a result of the October 2024 pension transaction, we estimate that we will record a non-cash, pre-tax pension settlement gain of approximately $650 million in the fourth quarter of 2024. This accounting gain results from recognizing in earnings a portion of the unrealized pension gain currently included on the balance sheet.

Future Utilization Strategy

The Company continues to responsibly use the overfunded balance and search for additional utilization opportunities

- Expected use cases
  - Continue to fund employee retirement benefits, including expanded coverage for additional business units
  - Utilize Voluntary Retirement Incentive Programs (VRIPs) and Separation Incentive Programs (SIPs) to minimize cash severance expenses

- Additional potential use cases
  - Absorb underfunded plan liabilities in an M&A transaction (e.g., 2017 Graham Media Group transaction)
  - Providing pension retirement benefits for employees from future transactions
    - ✓Shifting cash-based corporate funded 401(k) benefits to pension funded employee retirement benefits
  - Qualified Replacement Plan (QRP) transaction not currently under active consideration

So where does this leave us in terms of future planning for utilizing the overfunded pension plan? First and foremost, the Company's pension plan will continue to fund meaningful pension retirement benefits to its employees. The Company expects to continue doing so for many years to come without utilizing any funds from the Company's corporate treasury. Pension funding for early retirement and separation incentive programs at our business units will also continue to be available as needed.

There are several other potential opportunities for utilization of the overfunded pension plan.

- The Company will continue to explore M&A transactions that include assuming underfunded pension plan liabilities, as we did in 2017 in connection with the acquisition of two television stations.

- As we have done in the last few years, we will look to provide pension funded retirement benefits to employees from future acquisitions, shifting away from corporate-funded 401(k) benefits. This is an M&A “synergy” that is unique to Graham Holdings because of our overfunded pension status.
- The management team will continue to pursue other opportunities and initiatives to responsibly use the overfunded pension plan for the benefit of employees and the Company.

A few years back, the Company reported studying the possibility of a transaction in which a portion of the existing pension plan is spun off and then terminated in order to fund what is known as a Qualified Replacement Plan, or a QRP, which could allow the Company to utilize its pension surplus to fund and expand defined contribution benefits in a tax efficient manner. Because of the regulatory issues associated with this type of transaction, the Company instead has focused its efforts on enhancing and expanding pension benefits for its employees. While we are not actively considering this type of QRP transaction, we will continue to monitor possible regulatory changes in this area.

The Company’s historical management of the pension plan and related investment strategies over many decades has put the pension plan funding status and the Company in a highly enviable position. At current levels, the Company has both the ability to fully deliver on commitments to our current and future retirees and significant flexibility to design and fund future retirement benefits that will continue to attract and retain employees that contribute long-term value to the Company for many years to come.

Thanks, Wally. That wraps up the prepared remarks portion of today's event. At this time, we'll move to the Question and Answer session.

GRAHAM HOLDINGS

APPENDIX

NON-GAAP ADJUSTMENTS

GRAHAM HOLDINGS COMPANY

Non-GAAP Adjustments *$ in millions*

2023	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Other Businesses	Corporate Office	Total
Operating Income (Loss)	$104	$134	($17)	$24	$39	($160)	($56)	$69
Add: Amortization / Impairment	15	5	64	4	0	62	–	149
Add: Depreciation	38	12	9	5	5	15	1	86
Add: Pension Expense	9	3	1	14	0	3	4	34
Adjusted Operating Cash Flow	**$166**	**$155**	**$58**	**$47**	**$44**	**($81)**	**($51)**	**$338**
Capital Expenditures	(37)	(9)	(23)	(13)	(10)	(15)	(0)	(107)
Adjusted Free Cash Flow	**$129**	**$146**	**$34**	**$34**	**$34**	**($96)**	**($51)**	**$231**

2022	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Other Businesses	Corporate 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**

2021	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Other Businesses	Corporate 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**

Note: the sum of certain amounts may not equal the total due to rounding

Graham Holdings Company

Non-GAAP Adjustments *$ in millions*

Q3 '24 YTD	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Other Businesses	Corporate Office	Total
Operating Income (Loss)	$101	$123	$12	$33	$29	($111)	($43)	$143
Add: Amortization / Impairment	8	4	8	1	0	33	–	55
Add: Depreciation	27	8	8	5	5	12	0	66
Add: Pension Expense	13	5	2	14	0	6	3	43
Adjusted Operating Cash Flow	**$149**	**$140**	**$30**	**$54**	**$34**	**($60)**	**($40)**	**$307**
Capital Expenditures	(18)	(4)	(12)	(9)	(3)	(17)	(2)	(66)
Adjusted Free Cash Flow	**$131**	**$136**	**$18**	**$45**	**$31**	**($77)**	**($42)**	**$241**

Q3 '23 YTD	Education	Broadcasting	Manufacturing	Healthcare	Automotive	Other Businesses	Corporate Office	Total
Operating Income (Loss)	$83	$94	($22)	$17	$29	($132)	($40)	$29
Add: Amortization / Impairment	12	4	61	3	0	59	–	138
Add: Depreciation	28	9	7	4	4	11	0	63
Add: Pension Expense	7	2	1	11	0	2	3	25
Adjusted Operating Cash Flow	**$130**	**$110**	**$47**	**$34**	**$32**	**($61)**	**($37)**	**$255**
Capital Expenditures	(24)	(5)	(15)	(10)	(6)	(12)	(0)	(72)
Adjusted Free Cash Flow	**$106**	**$105**	**$32**	**$25**	**$26**	**($73)**	**($37)**	**$184**

Note: the sum of certain amounts may not equal the total due to rounding

Graham Holdings Company

Non-GAAP Adjustments *$ in millions*

2023	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total Education
Operating Income (Loss)	$88	$39	$22	($44)	$104
Add: Amortization / Impairment	–	–	–	15	15
Add: Depreciation	29	4	5	0	38
Add: Pension Expense	0	4	4	1	9
Adjusted Operating Cash Flow	**$116**	**$47**	**$32**	**($29)**	**$166**

2022	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total Education
Operating Income (Loss)	$72	$25	$21	($35)	$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**	**$33**	**$32**	**($18)**	**$142**

2021	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total Education
Operating Income (Loss)	$33	$25	$37	($45)	$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**	**$33**	**$47**	**($24)**	**$111**

Note: the sum of certain amounts may not equal the total due to rounding

Graham Holdings Company

Non-GAAP Adjustments *$ in millions*

Q3 '24 YTD	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total Education
Operating Income (Loss)	$83	$31	$21	($35)	$101
Add: Amortization / Impairment	–	–	–	8	8
Add: Depreciation	22	2	3	0	27
Add: Pension Expense	1	6	6	1	13
Adjusted Operating Cash Flow	**$105**	**$39**	**$30**	**($25)**	**$149**

Q3 '23 YTD	Kaplan International	Higher Education	Supplemental	Kaplan Corporate	Total Education
Operating Income (Loss)	$64	$33	$17	($32)	$83
Add: Amortization / Impairment	–	–	–	12	12
Add: Depreciation	21	3	4	0	28
Add: Pension Expense	0	3	3	1	7
Adjusted Operating Cash Flow	**$85**	**$40**	**$24**	**($19)**	**$130**

Note: the sum of certain amounts may not equal the total due to rounding

Graham Holdings Company – Investor Day

December 10, 2024