



2016 Integrated Summary
Annual Report

ch2m.[®]



2016 Integrated Summary Annual Report

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Oh yes, we did!

Did we just turn around the way our industry works?

It starts with our purpose, paving the way for human progress, delivering better social, environmental and economic outcomes. We're not afraid to zig when others zag or turn a problem upside-down because different perspectives reveal bigger opportunities inherent in the most complex challenges.

We're making a bigger difference in the way we work, with a unique approach that places clients at the center of everything we do – from pursuit to delivery and everything in between – in three global businesses aligned to client sectors: National Governments; State & Local Government; and the Private Sector.

“We moved boldly,
making a well-timed leap
ahead of the upturn.”



**A message from Chairwoman
and CEO Jacquie Hinman**

Fellow stockholders:

Throughout the past year, we moved to further differentiate CH2M so we are best-positioned as a trusted partner to the clients we serve around the world to win and deliver their projects with distinction. As a professional services firm tackling our clients' toughest infrastructure and natural resource challenges with optimism and imagination, we've always approached our work a bit differently, driven by our purpose to pave the way for human progress. If we zig when others zag or turn a problem upside-down to evaluate it from another angle, it's because we're looking for the most complete solution that returns value to our clients and stakeholders.

In 2016, we conducted a thoughtful, outside-in analysis to determine how we could operate and compete more effectively. We started first and foremost with our unwavering commitment to protect the health and safety of all stakeholders. We launched a global safety campaign where our management team, our employees and I reaffirmed our dedication to Target Zero. There's absolutely nothing more important than the safety of our people.

As a part of our analysis, we reinforced our industry-leading position in sustainability and corporate citizenship. As one of the first firms in our sector to publish a sustainability report about our internal performance, our most significant achievements stem from the work we deliver for our clients. That's why we elevated sustainability and citizenship as an integral part of this Integrated Summary Annual Report and for the first time, we have included aggregate measures of improvement achieved for our top 100 clients, in addition to our internal

achievements. Reflecting our client work delivering sustainable solutions and exemplary citizenship, in 2016 CH2M became the first professional services firm ever to be honored with the World Environment Center Gold Medal Award for global leadership influencing and delivering progressive environmental, social and economic outcomes.

In our competitive assessment, we noted that, like our peers, we weathered difficult economic conditions last year, driven largely by the prolonged effects of depressed oil and gas markets and uncertainty that constrained capital investment. In 2016 we also dealt with additional challenges that pressured our financial performance, including onerous costs from the same two, fixed-price projects that have burdened our performance in recent years.

Executing our strategy required that we were mindful of our 2016 performance as well as the near-term outlook for our industry. The challenges we encountered last year not only inspired us to elevate our best for our clients and stakeholders, but also prompted us to raise the bar competitively by accelerating the transformation we started in 2015. As I described in my letter to you last year, we had initiated strategic changes to bolster our market position and performance. These included refining our business portfolio to focus on repeat business with loyal clients and establishing client-centric sales, account management and operations to serve those clients with greater distinction and across a broader set of their needs, while also increasing our efficiency through shared services for administrative functions.

Client-centric operating model

Our 2016 competitive analysis confirmed that our client-centric approach was working to accelerate sales, create a stronger opportunity pipeline and drive higher margins. We wanted to make the most of this success and saw the opportunity to do so. Yet, we also confirmed there was room for improvement in our internal company governance, decision-making processes and cost structure. We knew this presented an opportunity to operationalize a distinctive strategy, rather than to pursue another efficiency exercise that, in recent years, had become the industry norm.

Considering our position relative to the rest of the consulting, engineering and construction sector — and amidst an improving outlook for our marketplace — in mid-2016 we recognized this as an inflection point from which to lever greater opportunity. So we made a bold, well-timed leap ahead of the upturn in our markets to fully align our operating model to our client-centric strategy.

We simplified our operating model and its associated organizational structure, accountabilities, governance and processes. While we still have some work to do, our competitively distinct new model places clients at the center of everything we do, aligned to the three client sectors we serve: National Governments; State & Local Governments; and Private Sector. With this change, we amplified a simplified and consistent governance model and removed internal silos that perpetuated duplication and inefficiencies in our operations.

Reducing complexity of our former matrix structure provides the firm clearer lines of accountability and streamlined decision-making, which strengthens our governance model and makes us more nimble.

Making such a dramatic change in the way we operate has compelled leaders and employees to think differently about the way we work. It has required patience, and for many, the willingness to take on new roles and responsibilities. To guide these efforts, we established a *Governance Playbook* to articulate unified business processes, responsibilities and protocols, while also underscoring the foundational values of our company.

This is all about making things easier to focus on what's important — our clients and selling and delivering work to them with distinction.

CH2M's Governance Playbook

We did this in a matter of months, now operating in a way that hasn't otherwise been mastered in our industry. We're unlocking productivity and greater growth potential in deeper client relationships, harnessing our full capacity of innovation and technical excellence, while providing our people with greater career opportunities. And already, we're realizing significant efficiencies to improve profitability, as evidenced by our reduction in selling, general and administrative expenses in the fourth quarter of 2016, which overall resulted in a 73-percent improvement in operating income from the prior year.

Full-year results

Our full-year 2016 revenue remained essentially flat year-over-year, at \$5.24 billion. We earned a disappointing \$15 million in net income, or \$0.03 per diluted share. These results do not reflect CH2M's potential, and they mask positive progress we achieved in managing our core business. During 2016 we incurred \$275 million in charges reflecting increased estimates in the costs to complete two design-build, fixed-price contracts signed years ago. One entails a tollway expansion project in Texas, and the other is an engineer-procure-construct (EPC) power plant project in Australia, in a business we've discontinued. Charges for both projects not only negated operating income during the year, but also overshadowed organic revenue growth in our non-construction business. As a result, they offset real improvements we made driving profitable, organic growth momentum in our core business.

We're getting both of these projects behind us. In January 2017, the consortium of companies of which we are a member delivering the EPC power plant project in Australia terminated the contract based on the client's repudiation, or refusal, to fulfill its obligations and administer the contract reasonably and in good faith. The client was a contractor and not a long-term, key client. In light of the contract's termination, we expect a prolonged, multi-year arbitration to follow. But since the contract has been terminated we no longer have to contend with risks of unanticipated project cost increases in completion estimates. Additionally, as the Texas tollway expansion project approaches completion this year, our cost risk exposure will wind down. We're looking forward to getting the project behind us.

As disappointing as those projects have been for us financially, we remain well on track to generate an annual savings of approximately \$100 million in operating costs from our more efficient, client-centric operating model. And judging by the momentum in our sales pipeline and trajectory of wins in recent months, we believe we are gaining the growth advantage we hoped to achieve. We're seeing a pickup in our core business with key clients who accounted for 70 percent of the new contracts we won in 2016. Our top 100 clients presented growth opportunities in new contract awards, while also contributing to our strong and growing pipeline of sales opportunities for 2017 and beyond.

Corporate governance and capital structure

Our management team and the CH2M Board of Directors continue to evaluate the best way to effect a new ownership structure for CH2M to gain access to capital so we can invest in the firm's growth and ensure liquidity for our stockholders. Keep in mind that as owners of CH2M stock, we all will have the opportunity to vote on any such proposed change. While the Board is actively assessing our industry and the status of capital markets, we have not yet taken any definitive actions. Several options remain available to take the firm forward: an initial public offering (IPO) of stock, a merger or an outright sale of the company. Each of these options has the potential to provide shareholders with liquidity while advancing the capability of the company to invest in the future.

We are working hard to execute our strategy to grow the value of our company and position the options for the best interests of CH2M and

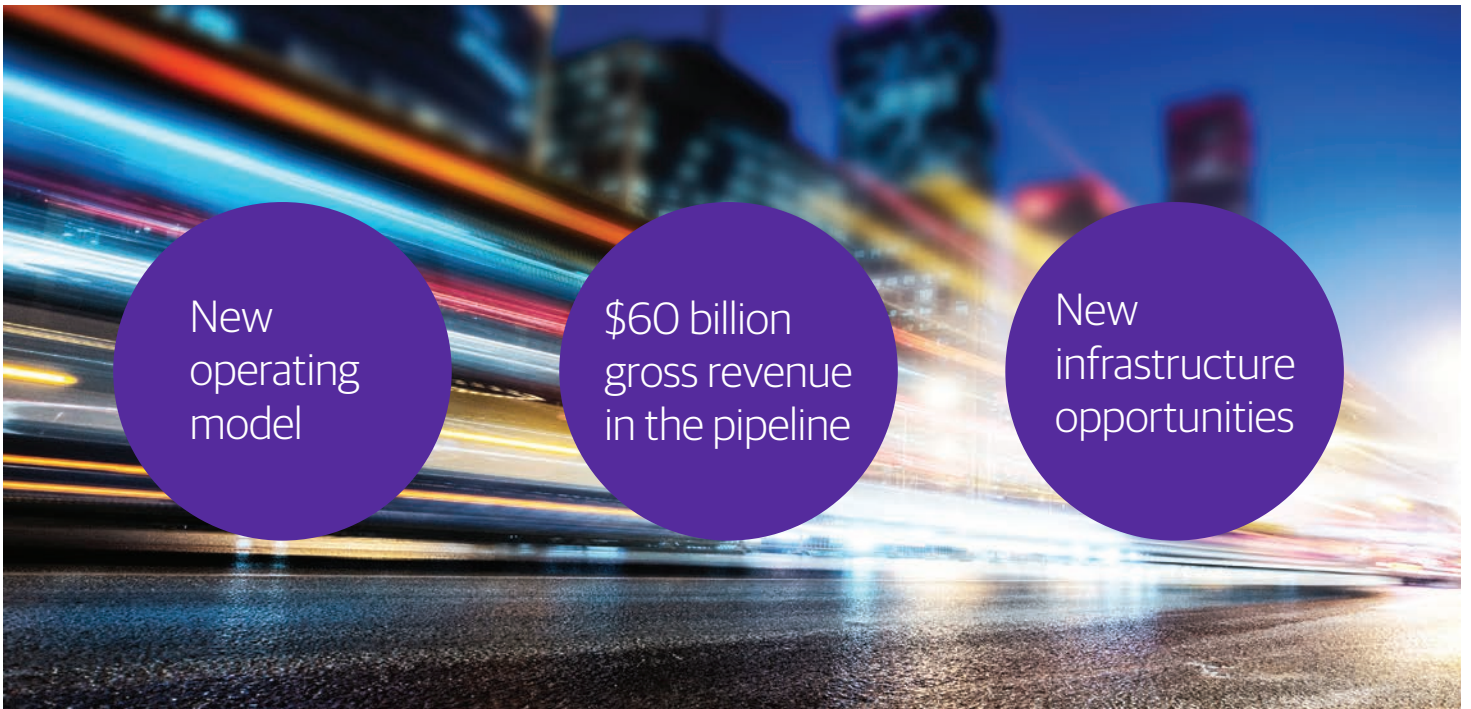
all of our stakeholders. We have tremendous potential, and we have made tremendous progress. I am more optimistic than ever about our ability to recapitalize the company for value creation, particularly in light of the competitive position provided by our new operating model, ahead of the growth expected in our industry and the expectation of stronger capital markets this year.

Market upside for CH2M in 2017 and beyond

The way we are working together on behalf of our clients combined with current market dynamics should serve us well in 2017 and beyond. There are arguably trillions of dollars in projects available globally in our markets: water, environmental, transportation, nuclear, energy, industrial and advanced facilities, and no single company in our sector holds a dominant market share.

As of this writing, we have more than \$60 billion of gross revenue in identified pursuits in our pipeline of sales opportunities, and at the end of the fourth quarter 2016, we had \$8.31 billion in revenue in backlog and stronger gross margin in backlog than we've seen in the past several years, to drive attractive, organic growth.

We remain well-positioned to grow with increased demand for digital solutions in the public and private sectors. The opportunities include both industrial and infrastructure projects, where mobile applications and automation technologies will revolutionize commerce, from driverless fleets to integrated water systems, to an era of adaptively smart cities.



New
operating
model

\$60 billion
gross revenue
in the pipeline

New
infrastructure
opportunities

Technology investment looks especially promising in the United States, where industrial tax credits tied to energy, as well as general tax reform, offer the potential to drive increased development opportunities in the commercial and manufacturing sectors. The driver here remains cheap energy prices.

Later this year and into 2018, we expect to see increased infrastructure and industrial development investments come to fruition. Among these, we're seeing early indications of recovery in world energy markets that would benefit our business in North America and the Middle East, while the outlook in Latin and South America points to modest industrial growth.

In the U.S., the new administration has projected plans to assemble \$1 trillion in public and private funding to improve America's infrastructure. Plans also have been announced to allocate more than \$600 billion for U.S. defense and nuclear programs, which we remain well-positioned to serve.

While we cannot yet estimate the ultimate effects of the 2019 Brexit on our business, we're positive about the strong infrastructure demand and investment we serve in the United Kingdom and Europe. In addition, we're also working on a number of vital urban development programs in Canada, the Middle East and Asia, where we're employing next-generation technologies and approaches to revitalize infrastructure, improve water systems, expand airports and extend rail transit.

We're employing next-generation technologies and approaches to revitalize infrastructure, improve water systems, expand airports and extend rail transit.

Where we shine

Among many awards, renewals and additional contracts we won with long-term clients in 2016 and early 2017, noteworthy highlights include:

Signature projects delivered

Including completing the third set of locks for the Panama Canal Authority; completing resort-wide infrastructure, detailed design and supervision for Phase 1 of Dubai Parks and Resorts, a world-class theme park and entertainment complex; and managing Thames Water's Lee Tunnel Programme, an engineering feat acknowledged by our industry as the Greatest Contribution to London and the overall Global Project of the Year. Distinctive projects such as these don't come around every day. Part of our strategy is to selectively evaluate and pursue those unique projects that match our risk profile and play to our strengths.

Major project wins

Including being selected to lead the development of the landmark Tuas Water Reclamation Plant for PUB, Singapore's National Water Agency, as well as the region's fifth desalination facility; serving as technical advisor for Kuala Lumpur-Singapore High Speed Rail; a framework agreement with Shell to provide global engineering services; and a number of significant, confidential private-sector contracts, including facility operations and development services for several global industrial companies; and a contract to provide concept design and evaluation services for the world's largest semiconductor production plant in Asia.

Advancing great cities

Including construction management services for the City of Atlanta's Hartsfield-Jackson International Airport; delivering the iconic Dubai Water Canal; expanding London's Heathrow Airport and the Crossrail and High Speed Rail programmes; working with Cisco to advance India's Shendra-Bidkin smart city along the Delhi-Mumbai Industrial Corridor; developing next-generation rapid transit for Toronto's Metrolinx system; addressing water resource issues in Mexico's most populous region with one of the largest wastewater treatment plants in the Americas; and serving as program manager to develop Denver's National Western Center as an international agribusiness hub.

Awards and distinctions

Including recognition from Singapore's national water agency honoring CH2M with its prestigious Watermark Award for leadership in water sustainability; celebrating our ninth consecutive year on Ethisphere's list of the World's Most Ethical Companies; and as mentioned earlier, we are proud to have received the 2016 World Environment Center Gold Medal Award for leadership in sustainability and corporate citizenship.

CH2M's bright future

With our core business portfolio focused on the right strategy, combined with our dynamic operating model, we are well-positioned to fuel profitable, organic growth, achieve solid operating results and command a competitive leadership position differentiated by our purpose and the way we work.

For our amazing employees, we've set the stage for career growth too, providing opportunities to bring bold ideas to the table by thinking differently about the world's most complex engineering, operations and management challenges. Working with our key clients, we are inspired by diverse perspectives and talents that greatly enhance our ability to conceive and deliver imaginative, world-changing, sustainable solutions.

At CH2M, we are driven by making a positive difference – for our clients, employees and stockholders. And more than any other year in our recent history, I expect this one to make the most meaningful difference, paving the way to excellent performance and a stronger capital position.

For everything we accomplished and all we stand to achieve, I want to thank our employees who responded to the call for change with extraordinary inspiration, courage and tenacity. In all my years in this business, I've never been more impressed, nor more proud, than I am of today's employees of CH2M.

On behalf of our entire team, I extend heartfelt appreciation to our extended family of stockholders and stakeholders for your enduring support, allowing CH2M to move onward and upward, to our fullest potential.

Sincerely,



Jacqueline Hinman
Chairman and Chief Executive Officer



Performance highlights

Years ended

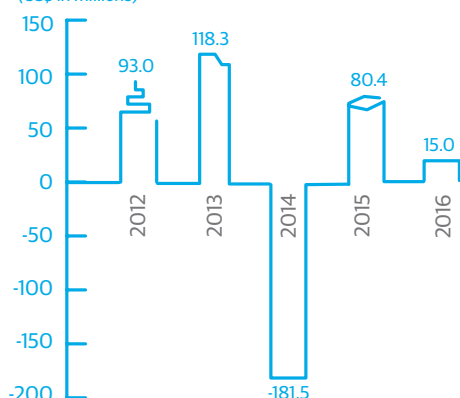
	Dec 30 2016	Dec 25 2015	Dec 31 2014	Dec 31 2013	Dec 31 2012
<i>(US\$ in millions, except per share data)</i>					
Selected Statement of Operations Data					
Gross revenue	\$5,235.9	\$5,361.5	\$5,413.5	\$5,877.8	\$6,160.6
Operating (loss) income	(240.1) ^(b)	134.8	(341.6) ^(d)	192.4	158.8
Net income (loss) attributable to CH2M	15.0 ^(b)	80.4	(181.5) ^(d)	118.3	93.0
Net income (loss) attributable to CH2M per common share					
Basic	\$0.03	\$2.62	\$(6.42)	\$4.00	\$2.99
Diluted	\$0.03	\$2.61	\$(6.42)	\$3.96	\$2.95
Selected Balance Sheet Data					
Total assets	\$2,670.5	\$2,861.3	\$2,941.3	\$3,056.4	\$3,114.6
Total debt, including current maturities ^(a)	497.9	301.7	513.0	391.1	252.3
Total CH2M stockholders' equity	546.7 ^(c)	412.2	212.8 ^(e)	624.4	603.7

- (a) Substantially all of our long-term debt relates to our revolving credit facility. Borrowings on this facility are primarily used for working capital needs, required pension contributions and funds to repurchase shares on our internal market.
- (b) The operating loss primarily was caused by estimated project losses and costs incurred for restructuring activities in 2016. The operating loss was offset by the release of a significant tax valuation allowance for an existing deferred tax asset related to the Halcrow Pension Scheme benefit restructuring as well as project losses attributable to noncontrolling interests resulting in net income attributable to CH2M.
- (c) The increase in stockholders' equity primarily relates to the change in accumulated other comprehensive income due to the Halcrow Pension Scheme benefit restructuring.
- (d) The primary cause for the operating loss and net loss attributable to CH2M relates to estimated project losses, impairment charges and costs incurred for restructuring activities in 2014.
- (e) The decrease in stockholders' equity is related to the consolidated net loss incurred in 2014, share repurchases and changes in assumptions that increased pension liabilities that are included in accumulated other comprehensive income.

The selected financial data presented above under the captions "Selected Statement of Operations Data" and "Selected Balance Sheet Data" for, and as of the end of, each of the years in the five-year period ended December 30, 2016, are derived from the consolidated financial statements of CH2M HILL Companies, Ltd. and subsidiaries, which consolidated financial statements have been audited by KPMG LLP, an independent registered public accounting firm. The consolidated financial statements as of December 30, 2016, and December 25, 2015, and for each of the years in the three-year period ended December 30, 2016, and the report thereon of KPMG LLP, are included in Item 15. Exhibits and Financial Statement Schedules of the Annual Report on Form 10-K. The following information should be read in conjunction with Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and related notes thereto.

Net income (loss)

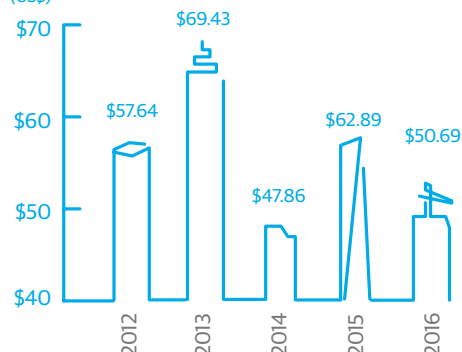
(US\$ in millions)



Stock valuation

Year-end values

(US\$)



This document contains "forward-looking statements," as that term is defined in U.S. federal and certain foreign securities regulations, including information related to our anticipated future operational and financial results, business strategies, client market segment expectations, and growth opportunities.

Although CH2M's management believes that its expectations are based on reasonable assumptions, these assumptions are subject to a wide range of economic, business, regulatory, technical, legal and other unforeseen risks which may cause actual results to differ materially from those stated or implied by these forward-looking statements. This communication therefore should be read in conjunction with all the other information included in our most current Prospectus and European Prospectus, which are filed with the U.S. Securities and Exchange Commission (SEC) and the U.K. Financial Conduct Authority (FCA), respectively, and, for our stockholders outside of the U.S. and the European Union, similar documents filed with local securities regulators, where required. You should also read our Annual Report on Form 10-K and quarterly reports on Form 10-Q, which include a list of factors that could cause actual operational and financial results to differ from those expected. For information about the price of CH2M HILL stock, please view our most recent Form 8-K. All documents required to be filed with the SEC and other regulators are available via the company's website at www.ch2mstockholder.com and on the SEC's website. CH2M undertakes no duty to update any forward-looking statement.

Safety first

There's nothing more important than the safety of our people and those we serve. We had no occupational fatalities and maintained recordable incident rates well below industry averages, but we didn't improve upon the prior year. So, we reaffirmed our Target Zero commitment in 2016 with an immersive safety evangelism campaign, engaging everyone to think, interact and demonstrate safe behaviors everywhere, all the time. Adding to CH2M's extensive portfolio of safety training, toolkits and activities, we produced a handy, pocket-sized Little Safety Book to hone in on the most common hazards.

Employee Recordables and Lost Time

Incident rates per 100 employees/work year



Note:

Lost time incidents are those that involve days away, restricted duty or transfer to another job. Both recordable and lost time incident rates are figured as a number of cases per 200,000 hours worked, as specified by industry standards. 200,000 is an estimate of the hours worked by 100 employees in a year. Includes worldwide recordables and lost time cases for all CH2M companies.



Upstanding citizenship

As a corporate citizen, CH2M partners with nonprofit organizations around the world to promote sustainable communities and STEM education for science, technology, engineering and math.

With funding from the CH2M Foundation, we combine corporate giving, client partnerships, employee contributions and volunteerism to engage actively in our communities:



\$1 million

granted by the CH2M Foundation in 2016



8 STEM

education programs



3 sustainability

partnerships – Bridges to Prosperity; Engineers Without Borders; and Water for People



7 foot bridges

in Panama, Nicaragua, Rwanda, the Philippines and East Timor



\$2.2 million

raised by employees through the year 2016 for Water for People



56 CH2Mers

volunteered for Bridges to Prosperity builds

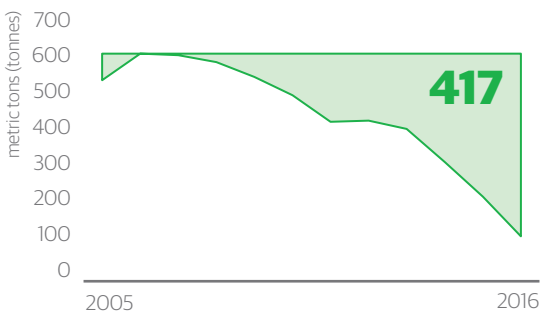
Environmentally friendly

CH2M again delivered outstanding environmental performance in 2016, with zero environmental fines or penalties across the variety of complex programs and projects we manage around the world.

In our own operations, we've set goals to continually reduce overall paper consumption, and increase our reliance on higher recycled content for the paper we do use. To date, we've cut our paper consumption 417 metric tons, and in 2016, set an all-time low in the amount of paper used. To put it in perspective, these paper savings reduce consumption of other resources as well, including impacts avoided on energy, trees and water resources.

Paper reduction

Reduction over 11 years



Carbon emissions

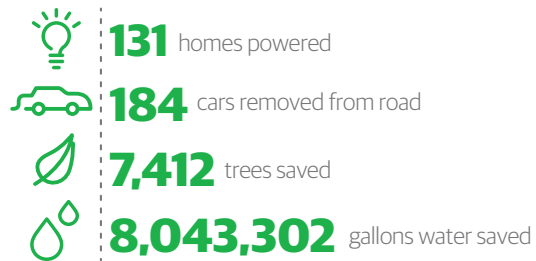
In 2016, we progressed further in our goal to reduce carbon emissions by 25 percent in our business operations globally. Since setting this goal in 2012, we've reduced net emissions by 21 percent and remain on track to achieve the balance as planned by the end of 2017.



CH2Mer Megan Shi volunteering with Bridges to Prosperity in Rwanda

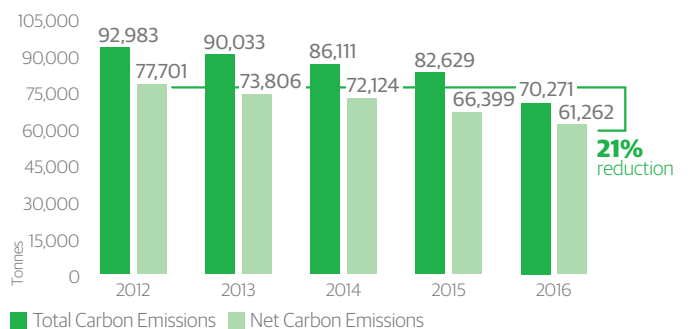
Impacts avoided

Impacts avoided through paper reduction



Carbon emissions reduction

CH2M Global Scope 1&2



Different thinking

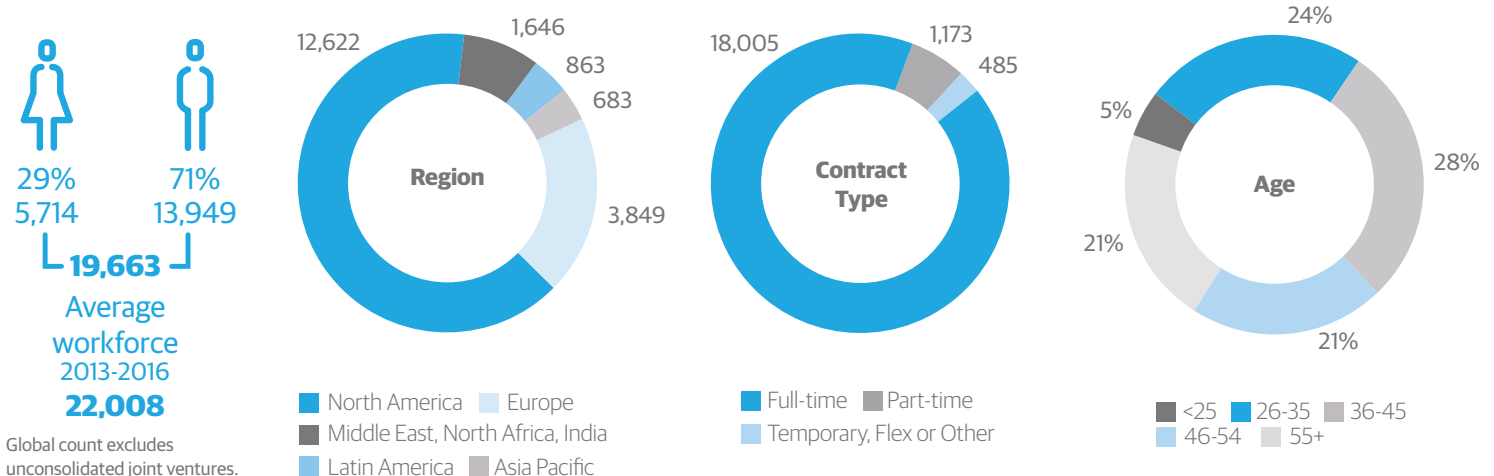
We hail from many different backgrounds, yet we understand that we only get to the best solutions by considering multi-faceted challenges from every imaginable perspective.

That's why we solicit input from people of all walks of life, with diverse talents and experiences, inclusive of community stakeholders and colleagues. We welcome the troubleshooters, dreamers and audacious challengers of the status quo to bring their ideas to the table, so that together, we may deliver something more than any one of us might have imagined possible.

We outperform industry averages for workforce diversity at CH2M, where women constitute 29 percent of management, while women and people of color account for 36 percent of directors on our board. Beyond characteristics of gender, age and ethnicity, we stand for an inclusive company culture to foster understanding and appreciation for the broader spectrum of differences, like lifestyle, social and economic status, creed, ideology and thought.

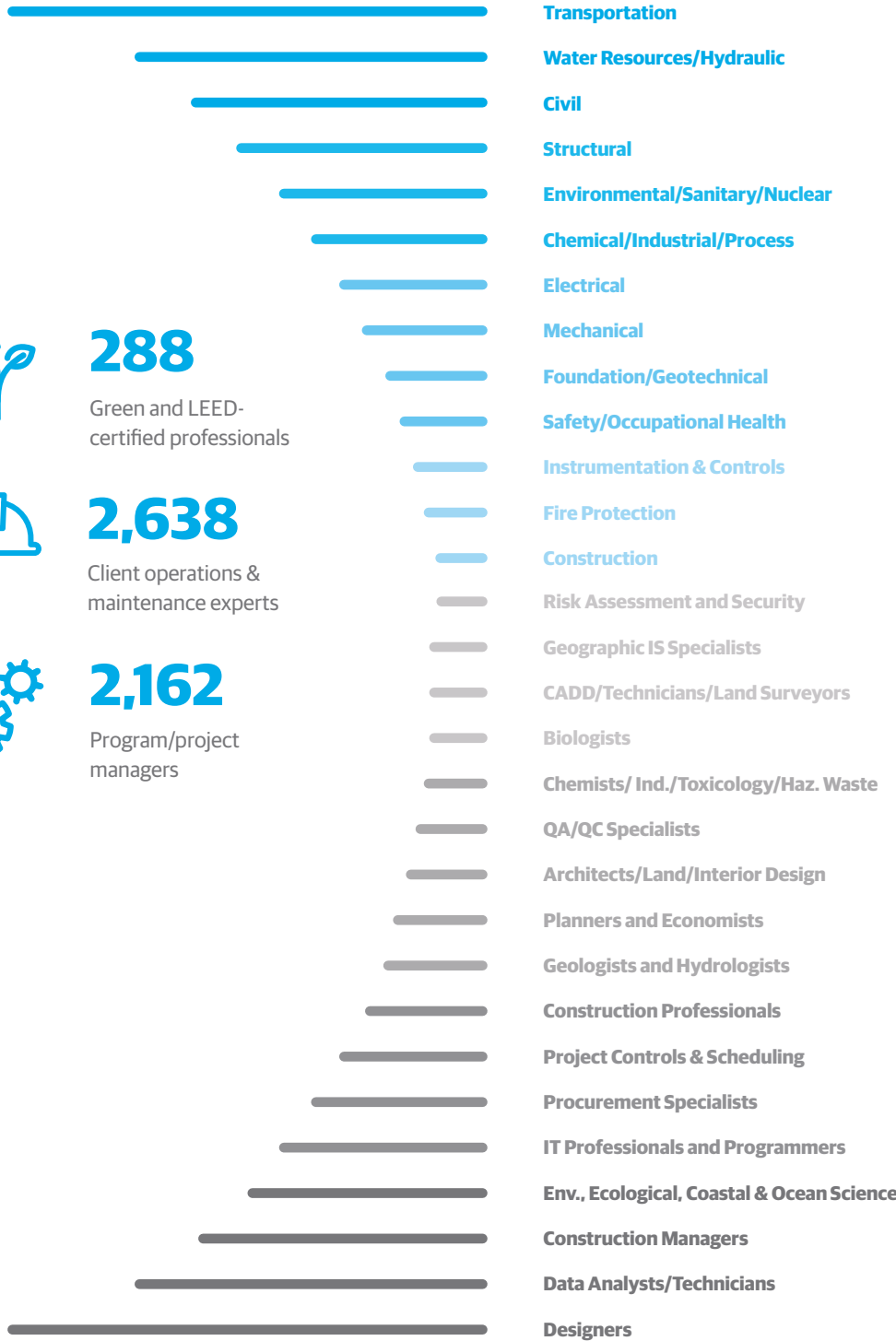
We promote inclusion across eight employee network groups, all of which are open to all employees. These groups connect CH2Mers around the world, encouraging them to share experiences and celebrate differences that make us unique, while also offering professional development and mentoring programs.

To develop a diverse, next-generation workforce, we invest in early STEM (science, technology, engineering and math) education via our CH2M Foundation, placing emphasis on partnerships targeting under represented populations. A third of the students we engage are young women, many from low-income areas, which allows us to introduce an under represented pool of talent to the breadth of career opportunities available in engineering.



Engineers

Scientific, design and technical experts



288

Green and LEED-certified professionals



2,638

Client operations & maintenance experts



2,162

Program/project managers

Market drivers

Global population growth, increasing urbanization and aging infrastructure have long surpassed public investments. But in the past decade, we've seen communities find new ways to address the widening infrastructure gap.

Tapping available resources to fill the infrastructure gap requires the kind of different thinking and collaboration approaches CH2M provides when managing complex development programs, from funding to delivery. In Canada and several countries in Europe and Asia, policies encourage infrastructure improvements financed by a combination of public and private resources. Among them, private investors and fund managers have viewed infrastructure assets as attractive, stable investment options offering good returns.

In the aftermath of an energy slump and economic uncertainties that curbed capital spending globally in recent years, a brighter outlook lies ahead. Expectations of stabilizing energy markets and U.S. policy measures promoting infrastructure and business development bode well for our clients.

Increased infrastructure investments in Canada, the U.K., Europe, Asia and the U.S. top the list of favorable market trends propelling growth in our sector. National government allies are earmarking increased investments in defense and security measures and supply chains for technology installations and base improvements, with robust demand continuing for nuclear decommissioning, remediation and reclamation activities.

In the U.S., general tax reform and industrial tax credits tied to energy should drive a significant increase in business and industrial development activities, especially in the energy and manufacturing sectors.

As business and governments release pent-up demand, their facility improvement plans include more extensive integration of productivity-enhancing digital technologies harnessing data for artificial intelligence, augmented/virtual reality, 3D production and next-generation automation.

Along with these broad market drivers, we're seeing growing interest in resiliency measures from state and local governments and continued strength in public works partnerships.

Public- and private-sector clients around the world trust CH2M to help them make efficient use of capital with best-practice project planning and management, proven by superior returns we deliver in social, environmental and economic progress — emphasis on the “and.”

Bringing vision to reality

We serve government and private-sector clients who envision a better future for their communities and commercial interests. We pursue all possibilities to bring their big ideas to fruition. And we deliver real, sustainable progress, from iconic infrastructure and industrial innovations to great cities.

CH2M's services and operating approach allow clients to draw on global best practices across areas of expertise, from initial planning through delivery and operations. That means every key client gets the best of every development advance, proprietary technology and industry-leading innovation we've proven for more than 70 years in business, including highlights of our work this year.

Accelerating infrastructure development to bridge the gap

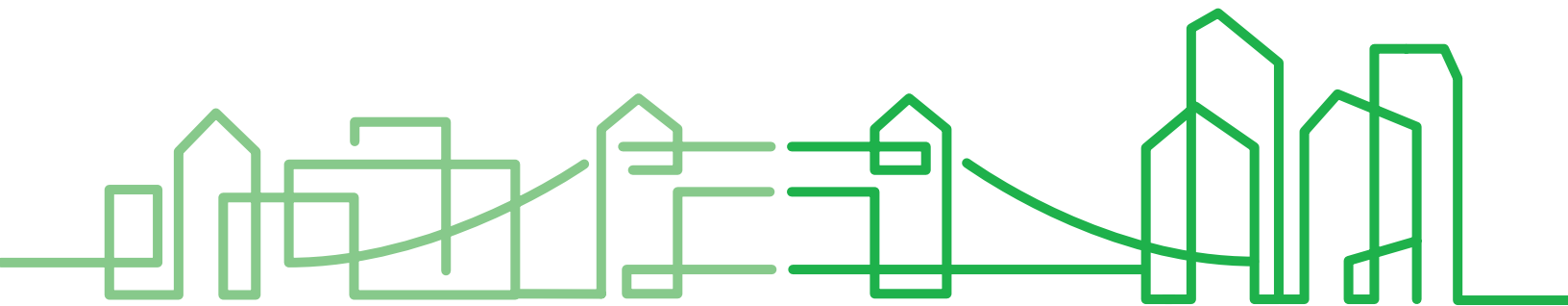
Today

The world invests **\$2.5 trillion annually** in transport, power, water and telecom

\$1 trillion

2030

The world needs to invest **\$3.3 trillion annually** just to meet growth forecasts by 2030



CH2M infrastructure program management

Return-oriented investment case

Inclusive funding models

Optimized asset management

Streamlined regulatory routes

Rethinking infrastructure investments

Following decades of underinvestment in mature and emerging economies, the gap between infrastructure needs and capital required to support global growth continues to widen. McKinsey & Company analysis pegs the shortfall at \$350 billion a year, not including the United Nations Sustainable Development Goals established in September 2015. Including those goals, the global infrastructure gap triples to more than \$1 trillion. Transportation, energy and water top the list of infrastructure priorities globally.

We apply best-practice program management to advance infrastructure developments where progressive public policies favor private participation, such as in Southeast

Asia, Europe and the Middle East. In the Americas, Canada has taken the lead in this respect, while only 34 states in the U.S. currently have laws on the books enabling public-private partnerships.

Our unique approach leverages global expertise in partnerships with innovative technologies, inclusive funding models and integrated delivery to maximize investible development opportunities offering clearly defined returns. Examples include developments featured throughout this report.

To bring funding to fruition for these priorities, we work with communities to accelerate return-oriented infrastructure developments that make a clear case for sustainable outcomes with proven program management to ensure public support and investment attractiveness.

Our key clients

Because we place clients at the center of everything we do, we define and operate our business differently from industry peers. Our best opportunities come from loyal clients with whom we enjoy longstanding, valued relationships built on mutual trust.

Improvement measures delivered to top 100 key clients and client operations in 2016

\$1 billion+ in efficiency and productivity savings delivered.

7,670 employee volunteer hours for clients and their communities.

499,348 tons of material recycled.

19.6 billion gallons wastewater reused (irrigation and industrial purposes).

819+ metric tons of CO₂ emissions eliminated.

151.8 billion gallons of used water treated.

100 workers on a major transportation project in the Middle East piloted a new, CH2M-developed mobile app designed to ensure worker welfare.

57,800 gallons fuel saved.

11.3 million Kwh electricity savings.

Client longevity	19% 41+ years	14% 31 to 40 years	21% 12 to 30 years	19% 11 to 20 years	14% 6 to 10 years	13% Up to 5 years
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Top 100 key clients



How we serve our clients

We're in business to serve our clients' needs, specifically in the areas of environmental, industrial and advanced facilities, transportation and water. Our experts offer our full portfolio of capabilities to solve any infrastructure challenge, no matter how complex. And our delivery platform is flexible enough to serve client needs at any point in the project continuum, from planning and consulting and program management to operations and maintenance and everything in between.

- Clients
- Global markets
- Delivery



Iconic infrastructure

Robust infrastructure establishes the backbone of productive, economically strong communities as assets essential to commerce, trade, public safety and quality of life.

At CH2M, we're entrusted to deliver some of the world's most complex and iconic infrastructure developments. Perhaps that's because we understand for our clients, these assets are so much more than big builds. It's why we combine holistic program management, global design and delivery to preserve the promise they envision — often once-in-a-lifetime, bankable projects that not only transform landscapes, waterways and city skylines, but also the livelihoods of the societies depending on them.

On the pages that follow, we share a few shining examples of current and recent infrastructure endeavors, with a nod to the clients who envisioned them.





Key facts

60%

The new locks feature water-savings basins that recycle up to 60 percent of the water used per transit.

2x

The expansion program doubled the canal's tonnage capacity, modernizing the global gateway for trade.

150 million+

The program excavated more than 150 million cubic meters of material to create a third lane of traffic.

160+

The canal connects more than 160 countries using more than 144 maritime routes. Each year approximately 13,000 to 14,000 vessels pass through the canal.



Expanding a modern wonder

Presented with the opportunity to enhance what the American Society of Civil Engineers cites as one of the seven wonders of the modern world, CH2M started working with the Panama Canal Authority in 2007 to deliver the \$5.25-billion expansion of the canal in 2016.

The project included design and construction of new Atlantic and Pacific locks to create a third lane of traffic, the Pacific access channel dry excavation and dam construction, and multiple improvements to widen and deepen the shipping channel. These efforts effectively doubled the canal's tonnage capacity and made room for much longer, wider ships. The improvements opened the way for additional trade and greater opportunities for the people of Panama and economies around the world.

Marking successful completion of the third set of locks on June 26, 2016, nations cheered the inaugural passage of a Neopanamax vessel operated by China's Cosco shipping company. The canal's expansion stands as one of the largest, most internationally significant projects in the world.

"CH2M has been accompanying the Panama Canal Expansion Program from its beginning. Their proven experience in the international program management arena has added value and mentoring to our integrated team. Providing professional support, CH2M worked with the Canal Authority to assist in achieving successful completion."

—
Jorge L. Quijano
Panama Canal Administrator



Photo courtesy of Panama Canal Authority

Key facts

3rd

Toronto has the third highest transit system ridership in North America.

746 miles

Within Toronto alone, public transit routes cover 746 miles — that's twice the length of the entire city!

6 million

When complete, almost 6 million people will have better, more reliable access to education, work, community services, healthcare and shopping.

0 CO₂

Light rail vehicles produce near-zero emissions, making them the right choice for the environment.



Connecting Canadian commuters

As one of the largest public investments in Canadian history, the Metrolinx Rapid Transit Program will connect commuters and communities across the Greater Toronto and Hamilton Area, which has the fourth-largest population in North America. The ambitious transit expansion program, slated for completion in 2022, will serve a vibrant metropolis that's growing by an average of 100,000 people each year.

CH2M has partnered with Metrolinx since 2010 on a complex set of interconnected deliverables to provide riders easy access to efficient, rapid transit and a complete transportation network. That's critical for our client, so it's top of mind for us.

We're providing owner's engineer and program management services to add three light rail transit (LRT) lines and vehicle maintenance facilities for the network in the City of Toronto. Already, the program is setting a new precedent in Canada for large and complex infrastructure improvements. And in 2016, we signed on to provide program management services for the Hamilton and Hurontario LRT lines as well as the GO Bus Infrastructure Program, while also serving as a vehicle technology consultant on the Regional Express Rail program. The regional program will offer electrified service all day, both ways, on the Metrolinx-owned GO Transit system.



Key facts

40%

The Lee Tunnel helps reduce untreated discharge into the River Thames by 40 percent.

100 years

Providing additional capacity to ensure London has a sewerage system fit for at least the next 100 years.

177 feet

At its peak, Busy Lizzie drove 177 feet a day.

800,000

Busy Lizzie excavated more than 800,000 tons of chalk, transferred off-site using barges.



Creating a cleaner Thames

Since 2008, CH2M has managed Thames Water's historic Thames Tideway Tunnel Program, including recent completion of the Lee Tunnel, which extends four miles in length.

Named *Engineering News-Record's* overall Global Project of the Year in 2016 and cited as the Greatest Contribution to London by the Institution of Civil Engineers in both 2016 and 2012, the Lee Tunnel now diverts wastewater flows to Europe's largest treatment facility in Beckton, reducing untreated discharges to improve the water quality of the Thames, England's second longest river and most vital estuary.

To deliver this extreme engineering feat, the project team had to call in a custom-made tunnel boring machine affectionately nicknamed, "Busy Lizzie." The gargantuan machine, which measured 400-foot-long and 98-foot-wide, was mission-critical to complete the tunnel on-budget and within the two-year schedule.

Photo courtesy of Thames Water



World-class communities

CH2M brings exceptional skills and creativity that play an integral role advancing the quality of life in cities around the world. We help local and state governments advance the revitalization and development of their urban centers, from core infrastructure to new investments.

We help cities compete for economic interests that create jobs, attract talent and cultivate opportunities for people to prosper. We engage with leaders and stakeholders to imagine and advance innovative and practical solutions that complement their communities' unique strengths and turn challenges into opportunities.

Across a full spectrum of great-city services, we serve public- and private-sector clients who want to deliver the promise of growth, while ensuring resilient and sustainable communities.







Fast forward in Southeast Asia

Singapore and Malaysia

We're serving multifaceted programs providing rapid-transit mobility and sustainable water services to meet the needs of a growing population.

MyHSR Corporation Sdn Bhd selected CH2M to serve in a technical advisory role during the development stage of the Kuala Lumpur—Singapore High Speed Rail project from 2016 to 2017. Envisioned to reduce travel time between Kuala Lumpur and Singapore to just 90 minutes, this fast-paced rail line will closely link two of the world's fastest-growing commercial centers to foster further investment and quality of life along the 217-mile route.

Working with the Public Utilities Board (PUB), Singapore's National Water Agency, we're leading the detailed design of the Tuas Water Reclamation Plant in western Singapore, a key component of PUB's Deep Tunnel Sewerage System Phase 2. Slated for completion in 2025, this mega-treatment facility will employ the most advanced treatment technologies to address key elements of PUB's holistic approach to managing the water cycle. The facility will treat used water for renewal and reuse in industrial processes, while recovering biogas to generate the electricity needed to power the facility.

With capacity planned to accommodate domestic used water flow averaging 650 megaliters (172 million gallons) per day in dry weather, it also will treat another 150 megaliters (40 million gallons) per day of non-domestic used water, both conveyed to the plant via deep underground tunnels. The Tuas facility will be co-located with an integrated waste-management facility being developed by Singapore's National Environment Agency, a first that will maximize the water-energy-waste nexus.

CH2M is the consultant for the development of Singapore's fifth desalination facility under a design-build-own-operate arrangement with the PUB.

The facility, to be located on Jurong Island, is planned to produce 30 million imperial gallons (36 million U.S. gallons) of water per day.

 **36 million**
gallons of water per day

Reflecting a partnership spanning 25 years, PUB selected CH2M as one of three recipients for its 2016 Watermark Award, recognizing our leadership in water sustainability, including community outreach and collaboration on many milestone projects advancing Singapore's water stewardship and sustainability.

"We are heartened by the initiatives and programs that CH2M, one of our Watermark Award recipients, has developed over the years to educate their internal and external stakeholders about water. CH2M is a sterling example of an organization that goes above and beyond to spread the water saving message and inspire the community to protect our precious water resource in Singapore. We hope more organizations like CH2M can come forward and go the extra mile for water."

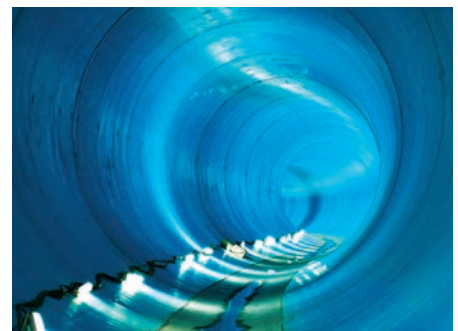
—
George Madhavan
Director of 3P Network, PUB



Kuala Lumpur-Singapore High Speed Rail



Singapore PUB Active, Beautiful, Clean Waters Programme



Singapore PUB Deep Tunnel Sewerage System



A sparkling waterway for Dubai

United Arab Emirates

The most populated city in the United Arab Emirates made history again in November with the opening of the Dubai Water Canal, a 16-mile waterway connecting Dubai Creek with the Arabian Gulf.

CH2M worked with the Dubai Roads and Transport Authority (RTA) to deliver the canal as a watermark signature, adding new vibrancy to Dubai's ultramodern cityscape as a centerpiece for a host of new residential and recreational developments.

Adding to this delivery milestone, the RTA recognized our outstanding safety performance with the Best Safety Consultant Award in 2016. It's a crowning achievement for a project we've helped to develop since 2004, providing a variety of services to bring this component of Dubai's master plan to life.

Key facts

 Attracting more than **30 million**

1 million the regional transit authority is expecting more than 1 million people to use the marine transport per year on the canal by 2020.

3 signature pedestrian bridges serve to enhance connectivity around the canal and are supplemented by stairs and ramps, with elevators for assisted convenience.

Adding to the program management support we're providing for the Dubai Expo 2020, the RTA tapped CH2M to design the Route 2020 Metro Rail project, extending a connection from Dubai's existing Metro Red Line to the Expo site. The nine-mile extension project adds seven new stations, including two underground stations, three elevated stations, an interchange station and a stop at the Expo site itself.

We also partnered with Dubai Parks and Resorts, LLC to support development of its master plan for the region's largest integrated theme park, including site-wide services, infrastructure design and project management. The first three theme parks were completed in 2016 and will welcome more than six million visitors this year.

Since the 1950s, our maritime, road, aviation and rail professionals have been helping to shape this leading-edge global city, which today stands as a world business and transportation hub.

Speaking at the Dubai Water Canal inauguration, "Every achievement and success that we celebrate motivates us to move ahead with confidence, determination and optimism. We are challenging ourselves to generate the best ideas and initiatives."

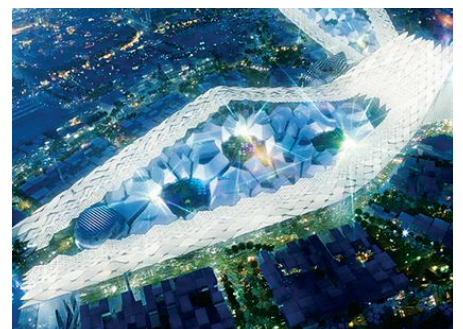
—
Shaikh Mohammed bin Rashid Al Maktoum
Vice-President and Prime Minister of the
UAE and Ruler of Dubai



Dubai Water Canal pedestrian bridge



Dubai Metro rendering



Dubai Expo 2020 rendering



Supporting London's sustainable success

England

Our partnership with London's leaders helped make the 2012 Olympic Games the most sustainable on record.

Along with socially and environmentally responsible management of the world-class event, we worked with our client on a bigger vision for development and delivery. Evidence of that vision continues to shine in London today, in sustained opportunities created for people, an improved environment and the prosperity of surrounding communities.

From critical transportation programs to water management solutions, our work plays a part in making London one of the world's most enduringly successful cities. To meet the demands of a population expected to grow to 10 million people by 2030, we support several of London's most vital infrastructure programs, including:

- Providing technical consultancy for Highway England's Lower Thames Crossing, the new river crossing in the Thames Estuary, linking Kent and Essex. One of the government's top 40 infrastructure projects, the "motorway-to-motorway" connection will offer the best balance of journey time improvements, value for money, economic benefits and environmental impact.
- We're supporting the critical expansion of London's Heathrow Airport, the busiest international airport in Europe and Britain's biggest port by value. The development program will strengthen Heathrow's standing as a sustainable hub airport that is attractive to passengers, airlines and investors. The expansion is expected to boost the UK economy by up to £211 billion, while creating up to 180,000 jobs and 10,000 apprenticeships.
- Working with Bazalgette Tunnel Ltd. and Thames Water to develop improvements that address capacity requirements and management for a cleaner, healthier River Thames.
- Collaborating with Crossrail Ltd. as part of an integrated programme partner to deliver a high-frequency, high-capacity railway for London and the South East, which will dramatically reduce travel times and increase London's rail capacity by 10 percent. As one of Europe's largest construction projects, the new railway will greatly improve public transport across London, delivering an essential element of the city's plans for supporting economic growth and faster, more convenient connections for decades to come.

 **Boosting the UK economy**
£211 billion



Prince Charles visiting Thames Tideway Lee Tunnel



Crossrail tunnel boring machines



Heathrow Airport expansion



New heights for Rocky Mountain state

United States

From roadway studies and city management, to imagining and designing new infrastructure for resilient, attractive communities – we also do world-class work in our own back yard.


To help solve capacity issues with Colorado's overcrowded Interstate-25 transportation system, we've been working with the Colorado Department of Transportation (CDOT) to improve the connection between the state's two largest cities, Denver and Colorado Springs. We are developing a Planning and Environmental Linkage Study and implementation plan, providing the blueprint to transform the critical stretch of highway. Our team recently signed on to advance design and construction of an early action project and deliver long-awaited enhancements in what will be CDOT's fastest ever project delivery.

In the spirit of helping adopt emerging technologies, we're also leading a road usage charge pilot research study, evaluating the feasibility of charging Colorado drivers for their equitable use of the road network instead of being charged by fuel consumption. As the only consultant in the industry to successfully plan, develop, design, test, manage and implement a road usage charge program in the U.S., we believe our home state is on the right path to develop sustainable infrastructure funding solutions.

Serving as the lead design consultant for Colorado Springs Utilities' Southern Delivery System (SDS) since 2002, we contributed to a reservoir connection at the north outlet works of Pueblo Dam, including 45.4 miles of 66-inch-diameter raw water pipeline; three pump stations that lift the water 1,500 feet in elevation; a new 50-million-gallon-per-day water treatment and finished water pump station; and 4.6 miles of large-diameter, finished water distribution pipeline.

The SDS program, which won *Engineering-News-Record's* Mountain States 2016 Best Project Award in the water/environment category, is the largest single infrastructure project ever undertaken by Colorado

Springs Utilities and finished on schedule and nearly \$160 million below budget.

 **\$160 million**
below budget and
on schedule

On the north side of Denver, we partnered with the Metro Wastewater Reclamation District to design and build a new regional wastewater treatment facility to serve the northern metropolitan area. The Northern Treatment Plant began treating wastewater in October 2016 and is one of the most advanced treatment facilities in the western U.S., meeting the stringent effluent limits established to protect the water quality of the South Platte River.

Faced with the complexity of creating a public works department in 2008 for the newly incorporated City of Centennial, we began the journey to help our client achieve the vision of a model department serving citizens every day. Working as an extension of the city, we provide public works services, in addition to code compliance and maintenance of facilities and parks for more than 106,000 residents. And we assisted the city in recently becoming the first-ever American Public Works Association accredited public-private partnership agency.

As a leader in global program management, we're excited to bring our special brand of expertise to our hometown, to deliver the bold and inspirational goals of the National Western Center Master Plan. This includes full rehabilitation of the site, creating a series of green and healthy spaces that will help to launch a new era for the National Western complex, Denver Coliseum and the adjoining neighborhoods, while developing the site as a global center for agriculture and ag-innovation.



Northern Treatment Plant



National Western Center rendering

"The National Western Center Program is a once-in-a-lifetime opportunity to invest in our community and create both a local and global destination for next generation agribusiness, education and entertainment. The CH2M team, including our partner firms, believes in the importance of preserving Denver's western heritage while embracing the wide-reaching potential embedded in this redevelopment. We are committed to the vision of creating an asset that will become a lasting economic and educational driver for the region."

—
Jacque Hinman
CH2M Chairman and CEO

Environmental and economic resiliency

Throughout decades of service to our clients, we've proven environmental and economic interests aren't mutually exclusive. On the contrary, the most enduring, resilient results show in developments that inclusively achieve triple-bottom-line improvements for people, planet and prosperity.

We're delivering programs to protect and enhance vital environmental and economic assets in ways that flip today's challenges into future opportunities. Among examples highlighted here are efforts to protect estuaries and renew coastal environments; digital technologies providing productivity-enhancing advances in public and private sectors; business and economic development endeavors; and mission-critical security and defense programs around the world.







From rising tides to resilience



From London

In London, CH2M and the UK Environment Agency formed the Thames Estuary Asset Management 2100 (TEAM2100) Program to protect Britain's Thames Estuary flood defense assets along the 175-kilometer tidal River Thames. The effort includes design and development of an extensive flood management program — the largest program of its kind — incorporating a series of fortifications, embankments, flood gates, pumping stations, outfalls and major barriers to protect London, Essex and Kent from tidal flooding. The program also integrates provisions to optimize returns on Thames flood defense investments, including continued maintenance, essential asset improvements and environmental upgrades to benefit people and wildlife along the tidal corridor. Valued at over £300 million, TEAM2100 is the Environment Agency's single largest flood risk management program and one of the government's top 40 infrastructure projects. Delivering greater value for public money is at the heart of TEAM2100, through innovation, greater collaboration with the supply chain and optimized asset and program management.

Key facts

1.3 million Protecting nearly 1.3 million people who live along the River Thames and its tributaries.

£275 billion The flood scheme is vital to keeping £275 billion of property along the river safe from future flood events.

4,000 Maintaining the estuary's more than 4,000 different assets.

30+ Many of the current defenses are more than 30 years old, and in some cases, more than 100 years old.

To New York

In New York, lessons learned from Superstorm Sandy prompted the city's Department of Design and Construction to develop an integrated coastal protection system for Lower Manhattan, from Montgomery Street to East 25th Street on the east side of the island. When completed, the CH2M-designed, one-mile system of flood walls, terraced levees, berms and deployable gates will shield the urban floodplain against floods and rising sea levels, while also providing social and environmental improvements for the area's 110,000 inhabitants.

CH2M also partnered with the New York City Economic Development Corporation, the City Department of Parks and Recreation and the U.S. Army Corps of Engineers to reimagine five miles of beachfront destroyed in the storm and create a resilient recreation corridor.

The reconstructed Rockaway Boardwalk replaced the former wooden structure with a curvaceous concrete walkway situated three feet above the 100-year storm elevation. The scenic beach corridor incorporates sand retaining walls and protective structures with inviting public spaces and natural barriers of dunes and vegetation.

The aesthetically pleasing walkway even earned the Waterfront Center's 2016 Excellence on the Waterfront Award, with one of the award jurists noting, "...Even by New York standards, this project is amazing."

Preserving and Enhancing the Global Water Environment

A recent inductee as a 2016 Water Environment Federation Fellow (WEF), Dr. Samuel Jeyanayagam, CH2M vice president and senior principal technologist, was recognized for his distinguished accomplishments and contributions to the preservation and enhancement of the global water environment. One of 15 professionals to accept this esteemed designation, Sam has co-authored more than 25 WEF publications and written and presented more than 180 papers.

Sam is involved with several pivotal areas of resource recovery research. In a carbon and energy constrained world, managing the available carbon takes central stage for Sam. He's been able to drive the paradigm shift of today's wastewater treatment plant to evolve as a water resource recovery facility of the future.

As WEF Task Force Chair, he led a group of industry leaders in the development of the recent Nutrient Roadmap, written to help utilities achieve zero net impacts from nutrient discharges by 2040. He also serves on the editorial board of the *Water Environment Research* and *Water Environment & Technology* journals.

Samuel Jeyanayagam, Ph.D.





Engineering on the digital edge

The reality is that the future is here, and as engineers, contractors and architects, all we need to do to experience it is to put on the latest virtual reality headset.

Virtual reality

We don't merely have to imagine what it would be like to explore the lost city of Petra or capture a glimpse of Earth from the reaches of space. We can experience it like never before using our smartphones.

The appeal of this top tech trend isn't only for consumers. We're taking advantage of virtual reality (VR) to solve age-old challenges of engineering design.

We're working at the epicenter of VR innovation, teaming with developers and testing new products, such as Google Cardboard, Samsung Gear VR, Oculus Rift and HTC Vibe, to continuously refine and tailor these tools, which stand to radically accelerate design review. Using CH2M-developed VR design review kits, our clients take advantage of dramatic project cost and schedule savings, reduced amount of costly changes, significantly shortened review cycles and enhanced collaboration, no matter where reviewers are located in the world.

These benefits are too great for us to ignore and as engineers, contractors and architects, all we need to do to experience it is put on the latest VR headset.

Driverless vehicles

Driverless vehicle technologies being tested by automakers and fleets promise significant benefits for society, including advances to improve public safety, manage traffic more efficiently, reduce carbon emissions and even mobilize people unable to transport themselves.

When it comes to driving the development of these revolutionary technologies, CH2M has its hands on the wheel. We're working with visionaries at the Nevada Department of Transportation to develop a framework and showcase for this exciting shift in mobility.



The CH2Mobile Field Data Collector

The CH2Mobile Field Data Collector offers instant form deployment to a mobile workforce who then have the capability to collect robust data in real-time using smartphones and tablets. The paperless solution captures and delivers clean, searchable data, including GPS location, time-stamping and robust and rich data sets such as photos, videos and audio — in connected and non-connected environments. All of it is wrapped up in PDF, CSV or Excel output with hundreds of integration options using third party solutions and direct post via application programming interfaces.

For one of CH2M's project development and environmental study projects in Florida, we were tasked with assessing the above-ground features along a 15-mile stretch of expressway, including roadway, drainage, structures, signage, intelligent transportation systems, utilities and lighting. Without a mobile application to capture thousands of points of data, our team would have had to collect data using hand-written forms, then transferring all the data into a master spreadsheet.

With the CH2Mobile application, the team utilized one data entry point, which meant having all the information at our fingertips without a separate data entry step. The application saved hundreds of hours in data collection, data entry, data correction and reports, which translated into a time and cost savings for our client.

Proprietary flood modelling app

CH2M's proprietary Flood Modeller Suite is an industry leading software-driven flood management application we've used around the world for more than 40 years, providing unparalleled support to a thriving community of users. Recently, we launched Flood Cloud so users can access and manage flood modeling data on any scale, anywhere, all from the cloud. Our clients, such as Natural Resources Wales, trust our software to handle their flood risk challenges.

"The flexibility, real-time performance and resilience which this software offers are important to us in delivering a flood forecasting service in Wales, where rivers respond rapidly to extreme rainfall and where we have high risk locations where we need to model the combined effects of high river and tidal flows."

—
**Flood Risk Manager
Natural Resources Wales**

Inspiring next generation to Dream Big

At CH2M, dreaming big starts with a desire to improve the communities where we work, live and play. Just ask Dr. Menzer Pehlivan, geotechnical engineer at CH2M and one of the stars of McGillivray Freeman's new IMAX film, *Dream Big: Engineering Our World*.

"Whether it's a wet-weather treatment station or an earthquake-resilient structure, as engineers our work helps make people's lives better every day, and it's very satisfying," she said.

Menzer was 13 years old, living in the capital city of Ankara, Turkey, when the 1999 Kocaeli earthquake hit the country. Menzer's family survived mostly unscathed, but their country had not. She was not content to process the tragedy through the eyes of a typical young teenager. She wanted answers. She wanted to help. And that's how her civil engineering career began.

To help fulfill her dream of mitigating the effects of natural disasters, Menzer went on to study civil engineering where she examined the 1999 earthquake. One of the ASCE 2016 New Faces of Civil Engineering Professionals, Menzer loves solving real-time challenges and being involved with projects that improve people's lives.

Menzer Pehlivan, Ph.D.



Advancing business and economic development



Making the “impossible” possible

In a fast-paced world, industries need reliable solutions to tough problems that can affect business viability. Helping our clients continue to be competitive and thrive means knowing their business goals, the pressures they face and the risks they need to manage.

We make the “impossible” possible, whether it’s solving a complex process challenge to get a new product to market, finding the right treatment solution to get a system online or figuring out how to meet regulatory compliance.

In support of its resiliency program, Newmont Mining, one of the world’s top gold producers, engaged CH2M to help analyze exposure to climate-related risks and develop processes for mitigation of those risks across its worldwide portfolio.

Focusing on Newmont’s five key energy and climate strategy pillars: securing reliable and cost-effective power supplies; minimizing energy use; advancing clean energy policy; reducing carbon footprint; and adapting to climate change, we modeled future climate conditions and impacts, and developed guidance and planning tools for addressing risks and challenges. The project earned a business achievement award from the *Climate Change Business Journal* for advancing best practices.

Across the U.S., wind energy is growing and poised to surpass hydropower as the largest source of renewable energy in the country. In 2016, CH2M booked its first offshore renewable energy

projects. We are currently engaged in the permitting process for projects on both the Atlantic Coast and the Great Lakes.

We serve the world’s leading energy companies, including oil and operations in technically challenging environments, from deep oceans to frozen tundra. On Alaska’s North Slope, we deliver comprehensive oil field and well support services to drive safe and efficient production in the harshest environmental conditions.

Looking to make transformational improvements in capital project delivery, Shell engaged us to provide engineering, procurement, construction and project management services across the company’s global upstream, integrated gas and downstream projects. We’ll deploy technical expertise with a shared, world-class safety management system to drive improved capital project execution, as well as technology and project management innovation.

Collaborating with a confidential electronics client in Asia to improve capital cost, reduce field labor and improve the quality of its new seven-story fab with three cleanroom levels, we provided design concepts and evaluation services for one of the largest planned facilities in the region. Our team developed a facility model to support future efforts, benchmarked new generation manufacturing requirements, key performance indicators and system delivery models for critical systems, and assessed current documentation and its capability to meet our client’s objectives.

An advocate for transportation’s future

Coupling transit planning, roadway/highway design, and transit safety skills with a passion for pushing the industry forward, Charlie Hetland has proven himself to be a leader in the industry by taking on stretch positions addressing financing shortfalls and deferred maintenance challenges to ensure a robust, effective and sustainable transportation infrastructure.

As the Government Relations Chair for the American Society of Civil Engineers, Charlie has brought to light the need for transportation infrastructure funding. During November 2016, Charlie worked alongside the Mayor of Los Angeles as a devoted campaign volunteer on a successful campaign for \$120 billion in transportation projects for Los Angeles County. In addition, he has made several trips to Sacramento, California and Washington D.C. with various coalitions to advocate for transportation funding and public-private partnerships.

A constant student of his practice, Charlie has positioned himself in the industry with recognition from The American Road & Transportation Builders Association and American Public Transportation Association. He also was named 2016 ASCE Outstanding Civil Engineer National Advocate of the Year.

Charlie Hetland







Maintaining defenses

Constant vigilance. That's what it takes to sustain an all-day, everyday mission and ensure safe and efficient facilities for military operations.

Expertise and preparedness also are required to make reliable enhancements to strategic locations. CH2M brings a long history of experience delivering specialized defense infrastructure to support, sustain and improve mission effectiveness amidst complex operations and ever-changing dynamics.

South Korea

In South Korea, we're leading a consortium to deliver the U.S. Army Corps of Engineers' largest construction project. Serving the Corps' Far East District, we're supporting the efforts to consolidate multiple bases around the country into a small number of enduring hubs. The primary new location is U.S. Army Garrison Humphreys, about 40 miles south of Seoul.

Establishing the combined base is like building a city for 45,000 people from the ground-up – in this case, including land formerly used for rice paddies. Our work involves planning, organizing, controlling and executing all aspects of delivery for this complex, mission-critical program for the U.S. and South Korean military.

Key facts

\$10.7 billion The value of the Korea Base Relocation program, the largest US Army Corps of Engineers construction program since the original Panama Canal.

655 The number of structures designed and built.

30,000 The program relocated 30,000 U.S. troops.

14,000 The number of workers at peak construction.



United Kingdom

In the U.K., we're part of a consortium helping the Ministry of Defence transform its Defence Equipment and Support (DE&S) operations, responsible for £14 billion-a-year procurement and management of the majority of the equipment used by the nation's armed forces around the world.

DE&S, which in 2014 was given greater freedom and autonomy from the Ministry of Defence to manage its business, acquires and supports everything from submarines and warships, to aircraft, vehicles and military essentials. As part of the DE&S transformation program consortium, we're imparting expertise in management and logistics delivery expertise to help DE&S establish structured approaches to learning and career development for personnel, with an improved performance management system to support DE&S' business operations.

The three-year transformation program is now complete and DE&S — employing 11,600 military and civilian staff — is embedding the new policies and practices to help it deliver the best possible support to the U.K.'s Armed Forces.

India

In West Bengal, India, we worked with longstanding key client Lockheed Martin to provide engineering support, including overall program management, design review and construction oversight, to restore the World War II-era Indian Air Force Station at Panagarh to operating condition. Lockheed Martin will use this station to mobilize a fleet of C130-J aircraft, which will be delivered to the Indian Air Force.

Our work included construction of two hangar facilities, a runway apron and taxi links, facilities for mission support,

a squadron "Warrior Training" classroom facility and air station warehousing and support systems. The finished product was dubbed "the Miracle in Panagarh" by a dignitary who visited the newly mobilized air base, which was completed on-time and on-budget in 2016.

United States

Lockheed Martin Space Systems Company also tapped CH2M to provide architectural and engineering services to support the Strategic Weapons Systems Ashore program at Complex 25 of the Cape Canaveral Air Force Station in Florida.

The goal? A completed facility enabling testing of fire control and missile systems at one integrated facility instead of several contractor locations around the country. Our on-schedule delivery of this unique facility enables Lockheed Martin to continue its more than 60 year legacy of support to the Fleet Ballistic Missile Program.

"On behalf of Lockheed Martin Space Systems Company, the FBM (Fleet Ballistic Missiles) Eastern Range team would like to extend our sincere appreciation to the entire CH2M organization supporting the SWS Ashore project here at Cape Canaveral AFS Launch Complex 25. In addition to meeting the cost, schedule and technical requirements for this effort, CH2M has performed with a high degree of professionalism and ethical business conduct throughout the entire project."

—
Karin Jamison
Director, Lockheed Martin
FBM Test & Support Products

Turning challenges into opportunity

A blank page. For many of us, it's frightening. For CH2M's Dyan Foss, it's an opportunity waiting to happen.

"I love a blank page. There's nothing I find more tantalizing than a blank page," she said.

For Dyan, global managing director of Nuclear, the blank page is transforming contaminated sites into clean and usable space. Her time with CH2M began at a former nuclear weapons facility. The team decommissioned a highly contaminated nuclear complex in just 10 years, outperforming an estimate of 70 years, by developing first-of-their-kind tactics and ultimately turning the area into a wildlife refuge. Dyan took her expertise to work on several decommissioning projects in Ohio and Washington in the U.S. and in Scotland.

Her engagement extends beyond her CH2M work, and includes participating regularly in industry discussions and organizations. In June 2015, Dyan was elected to the Energy Facility Contractors Group Board of Directors, a self-directed coalition of U.S. Department of Energy (DOE) prime and subcontractors formed to promote the exchange of information, lessons learned and best practices used by DOE contractors.

Dyan Foss



We're also leading efforts to implement innovative Green and Sustainable Remediation (GSR) technologies at our defense installations, and even recently helped our Travis Air Force Base (AFB) client in California become the first U.S. Department of Defense installation to complete the American Society for Testing and Materials International greener cleanups self-declaration process.

"This certification demonstrates that we were on the right track when we designed and tested innovative cleanup technologies that do not consume large amounts of energy or generate a lot of waste."

—
Glenn Anderson
Geologist, Air Force Civil Engineer
Center Installation Support Team

The GSR techniques applied at Travis AFB helped reduce annual system operations and maintenance costs by more than \$200,000 per year, while avoiding electrical consumption of approximately 790,000 kilowatt-hours per year and reducing annual carbon dioxide emissions by approximately 930 tons per year. To put it into perspective, that's equivalent to the electrical consumption of approximately 120 California homes and the emissions of approximately 200 cars per year, respectively.

Key facts

\$200,000 annual savings in system operations and maintenance

700,000 Kwh saved per year

930 tons of CO₂ emissions eliminated annually

Health security

Just as protecting infrastructure is critical to national security, reducing the threat of infectious diseases, such as the Ebola virus and other health security issues, is vital. Through design, engineering, construction and infrastructure services and scientific expertise and training for staff at laboratory and emergency operations facilities, we're improving biosafety and biosecurity processes, and disease detection and reporting, to meet international standards for countries such as Liberia, Sierra Leone, Guinea and Senegal. We also are supporting the development of national biosecurity/biosafety legislation for countries such as Georgia, Armenia and Senegal, and ensuring laboratory policies and procedures in these and other countries meet international standards.

Decommissioning

After every mission, CH2M stands ready to decommission legacy defense installations. Working with the U.S. DOE to tackle complex challenges that come



2nd consecutive

Star of Excellence award
for safety leadership

with managing nuclear liabilities, being safe, yet innovative, remains critical.

Since 2008, we've managed one of the largest nuclear decommissioning programs in the world at DOE's Hanford site. Focusing on removing the threat of hazards to the Columbia River and reducing the 586-square-mile site to an active cleanup area of 75 square miles, key 2016 accomplishments include:

- Implementing the use of an advanced groundwater treatment resin that's projected to save \$3 million annually.
- Assuming the remaining work scope under the River Corridor Closure project, the largest environmental cleanup closure project in the United States.
- Safely removing the most contaminated glovebox and commencing demolition of the heavily contaminated Plutonium Finishing Plant, which once supported production of two-thirds of the nation's plutonium during its operation.



CH2M at a glance



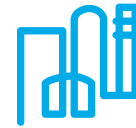
State & Local Governments

Helping cities, counties, states, local authorities and provinces transform the way citizens and businesses interact with their infrastructure and their environment, with a focus on enhancing quality of life.



National Governments

Partnering with governments around the world, as well as contractors who support national agencies and departments, to advance defense, environmental, infrastructure, social and economic missions.



Private Sector

Serving many of the world's leading global and large private companies, spanning the manufacturing, power, oil and gas, electronics, chemicals, process and life sciences industries.

Cross-cutting technical practices

Water

- Conveyance & Storage
- Drinking Water & Reuse
- Industrial Water
- Intelligent Systems
- Strategic Consulting
- Wastewater
- Water Resources & Ecosystems Management

Environmental

- Environmental Asset Services
- Environmental Health & Safety and Sustainability
- Environmental Liability Services

- Environmental Planning
- Information Management
- Nuclear Liabilities Management
- Site Planning & Permitting
- Site Remediation & Revitalization
- Waste Management

Industrial & Advanced Facilities

- Advanced Facilities & Life Sciences
- Facilities & Infrastructure Services
- Hydrocarbon Processes
- Terminals, Pipelines & Infrastructure
- Threat Reduction & Public Health Security

Transportation

- Aviation
- Highways & Bridges
- Infrastructure Planning Advisory & Permitting
- Ports & Maritime
- Transit & Rail
- Tunnel & Earth Engineering



About CH2M

CH2M leads the professional services industry delivering sustainable solutions benefiting societal, environmental and economic outcomes with the development of infrastructure and industry. In this way, CH2Mers make a positive difference providing consulting, design, engineering and management services for clients needing world-class solutions in environmental; industrial and advanced facilities; transportation; and water markets, from iconic infrastructure to global programs like the Olympic Games.

Ranked among the World's Most Ethical Companies and top firms in environmental consulting and program management, CH2M in 2016 became the first professional services firm honored with the World Environment Center Gold Medal Award for efforts advancing sustainable development. Connect with CH2M at www.ch2m.com, LinkedIn, Twitter and Facebook.

Environmental Industry Rankings (ENR)

- #2** Environmental Overall
- #2** Environmental Asset Management
- #2** Nuclear Liability Services
- #5** Environmental Liability Services

Industrial Industry Rankings (ENR)

- #1** Semiconductors
- #2** Manufacturing
- #3** Pipelines
- #5** Chemical Plants
- #5** Steel and Non-ferrous Plants

Infrastructure Industry Rankings (ENR)

- #1** Int'l. Water Treatment & Desalination
- #1** Sewerage and Waste
- #1** Wastewater Treatment Plants
- #1** Site Assessment and Compliance
- #2** Engineering/Design
- #2** Highways
- #2** Marine & Port Facilities
- #2** Water Treatment and Desalination
- #3** Design Firm in Water
- #3** Hazardous Waste
- #3** Sanitary and Storm Sewers
- #3** Transportation
- #3** Water Supply and Treatment
- #5** Airports
- #5** Mass Transit & Rail



Join the upside
The CH2M difference

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