

The Land Development Design Initiative (LDDI) 2019 Annual Report



LAND DEVELOPMENT
DESIGN INITIATIVE

Program Coordinator's Message

Welcome to the 2019 edition of the Land Development Design Initiative's Annual Report. This year marks the ninth consecutive year that we've published this report, and it's always such a pleasure to work on it alongside LDDI Assistant Coordinator Kevin Young. For us, it's an opportunity to reflect on the past year's successes, achievements and, yes, challenges! For some of you, the report will serve as your first introduction to LDDI. For others, it's an annual publication that you've come to rely on to keep you informed of the current status of the program. For our younger readers, the report's articles may leave you with a smile on your face as you fondly reflect back on your own time in the LDDI program (feeling homesick for Blacksburg is okay!). With LDDI now in its thirteenth year, the photos and stories in this report provide a snapshot of a program that has attained national recognition and positively impacted countless young engineers, as well as the broader land development industry. Whether you're a first time reader of this report, a longtime supporter of LDDI, or a recent graduate of the program, I sincerely hope that you will enjoy reading this report as much as Kevin and I have enjoyed preparing it for you.



Before proceeding any further, I would be remiss in this annual greeting if I were to omit a hearty expression of gratitude to the organizations and individuals who have supported LDDI, financially and in other ways, over the previous year. During 2018-19, LDDI enjoyed the financial support of 50 corporate sponsors and municipal members – the most in program history! Similarly, individual donations to the program grew considerably last year, with the program now having received contributions from nearly 100 unique donors. Contributions from individual donors are directed in their entirety to a fund through which we are striving to endow the LDDI program. The goal of this endowment is to ensure long-term program growth and sustainability, and to enable the hiring of additional faculty to address the exploding enrollment numbers at Virginia Tech. The past year saw major strides forward in support of that endowment effort with continuing multi-year pledges made to the fund by Pennoni, Bohler Engineering, Van Metre Homes, and GORDON. To all of the individuals and organizations who contributed financially to LDDI last year, and on behalf of the entire LDDI Advisory Board and our students, I offer our most sincere THANK YOU! I also want to recognize and extend our gratitude to all of the industry professionals who, over the past year, gave so generously of their time as student mentors, guest lecturers, field trip leaders, course instructors, and in countless other ways to strengthen and improve the LDDI program. We simply couldn't do it without you!

In the coming pages you'll read all about the exciting events and activities surrounding the LDDI program over the previous year, including course offerings, practitioner involvement inside and outside of the classroom, an incredibly active student club, research endeavors, general membership meetings, and much, much more! You'll also read about some of the organizations and individuals who have generously given of their time and resources to help LDDI continue to better prepare students for careers in the land development industry. As you read about the past year's activities, and these organizations and individuals, I hope that you will be motivated to become involved in the LDDI program. There are numerous ways that you can participate in the program and make a real, positive impact on future land development professionals. On page 27 you will find the contact information for myself, Kevin Young, and our Advisory Board Chair and Co-Chair. Please don't hesitate to reach out to us if you want to become involved or have ideas for improving the program that you would like to share!

Best regards,

A handwritten signature in black ink that reads "Randy Dymond".

Randy Dymond, PhD, PE, F.ASCE, D.WRE
Coord, Land Development Design Initiative
Professor of Civil & Environmental Engineering
Virginia Tech

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Diamond and Platinum Corporate Sponsors

During our 2018-19 fiscal year, Diamond and Platinum Corporate Sponsors contributed over \$150,000 to LDDI. The following section highlights each of these corporate sponsors, by level alphabetically, and their involvement with LDDI.

Diamond Level:

ADS

From its introduction and championing of corrugated plastic drainage pipe in the United States more than fifty years ago, to its current line of innovative products, Advanced Drainage Systems has been an industry leading materials supplier for the land development industry. The company is focused on drainage products and services that deliver solutions for the most persistent and challenging water management problems. From safely pre-treating and managing stormwater runoff, to helping developers and property owners harvest rainwater, ADS focuses on the development of water solutions that make land more arable, cities more livable, and the world a greener place to live. 2019 marked ADS' second year as a Diamond-level sponsor of the LDDI program.



Bohler Engineering

With outstanding, driven professionals and more than 20 locations from Texas to New England, Bohler provides consulting and technical design services to developers and their partners across all commercial, institutional and residential real estate sectors. Bohler arms their clients with critical information to make profitable real estate decisions and designs that deliver exceptional results. From early stage concepts to detailed project closeouts, Bohler embraces their role in the development and construction process and always acts in their clients' best interest. Bohler has been a sponsor of LDDI since 2007, and, Brett Buckland (Atlanta, GA), Heather Clements (Washington D.C.), and Charlie Yowell, (Raleigh, NC), currently serve on the LDDI Advisory Board.



Bowman Consulting

Bowman Consulting was founded in 1995 with 5 people in Fairfax, VA. Since that time, the firm has been recognized as one of the fastest-growing consulting firms with 33 offices distributed across the United States. They offer services in Civil Engineering, Planning, Landscape



Architecture, Surveying, Environmental Consulting, Transportation, and more. Bowman Consulting has been a sponsor of LDDI since 2007. Roy Waugh, Principal from the Chantilly, VA office, is a Life Member on the LDDI Advisory Board and served as the Board's Chair in 2014. In April of 2019, frequent CEE 4274 mentor and Project Manager in Bowman's Fredericksburg office, Bill Pyle, joined the Board. Firm President, Gary Bowman, serves on the LDDI Platinum Board.

Concrete Pipe and Precast

Concrete Pipe & Precast, LLC (CP&P) serves the construction industry with concrete pipe and precast products in the Mid-Atlantic and Southeastern United States. CP&P believes its people are the heart of its business. As a company, and as individuals, they value integrity, relationships and mutual respect. They hold themselves accountable to their customers and employees by honoring their commitments, providing results, and striving for the highest quality in their products each and every day. They are focused on delivering outstanding value to their customers through innovative products and committed partnerships. CP&P operates five pipe plants and eight precast structures plants, and 2018 marked the company's inaugural year as a LDDI Diamond-level sponsor.



PENNONI

Pennoni was founded in 1966, and over the years has grown to employ more than 1,200 professionals serving the needs of clients around the globe. As a multidisciplinary firm, Pennoni's breadth of services includes civil/site, construction services, environmental, geotechnical, landscape architecture and planning, MEP, structural, survey and geomatics, transportation, water resources, and water/wastewater. Pennoni is a Diamond-level supporter of the LDDI program, and Regional Vice President Susan Wolford, PLA, AICP, ENV SP, LEED Green Associate served as Chair of the LDDI Advisory Board during 2018. In addition, Thomas D. Rust, PE, AICP, Vice Chair at Pennoni is on the LDDI Platinum Board.



Platinum Level:

AES Consulting Engineers

Founded in 1980, AES Consulting Engineers (AES) provides land development engineering design services from offices in Richmond, Williamsburg, and Chesapeake, Virginia. AES provides Civil Site Design, Landscape Architecture, Surveying, Land Planning, and Municipal Utilities Design. AES has been a sponsor of LDDI since 2007. Project Manager Graham Corson is an active member of the LDDI Advisory Board, and firm President, Arch Marston, is a life member of the Board.



ATCS

ATCS is a professional consulting firm dedicated to providing comprehensive, multidisciplinary services including land development, transportation planning and design, traffic engineering, construction management and inspection, environmental sciences, emergency management services, water resources, water/wastewater, and surveying. Headquartered in Herndon, VA, the firm has eight offices across Virginia, Maryland, North Carolina, and Pennsylvania. The firm is passionate about the work they do, the communities they serve, and the services they provide. ATCS has been a Platinum-level supporter of LDDI since 2016, and in 2019 VP/Operations Manager Kevin Siegel joined the LDDI Advisory Board. Firm President, Young Ho Chang, and Vice President, Larry Caruthers, serve on the LDDI Platinum Board.



christopher consultants

christopher consultants, ltd. (christopher) was founded in 1982 and is a full service civil engineering, surveying, planning, and landscape architecture firm headquartered in Fairfax, Virginia. Their 4 offices serve the Mid-Atlantic, cities across the U.S. and select international locations.

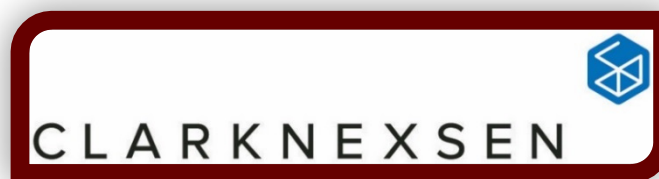
In their 37-year history, christopher has had the opportunity to work on many high-profile and award-winning projects. christopher is a designated small business under Virginia's SWaM program. christopher has been a proud sponsor of LDDI since 2007. Principal Andy Gorecki, P.E. currently serves on the LDDI Advisory Board.



Clark Nexsen

Clark Nexsen believes partnership – with their clients, with their colleagues, and with their communities – is fundamental to the effective pursuit of transformative design. Clark

Nexsen engineers, planners and architects partner with their clients to shape ideas that transform our world. Their clients benefit from a process forged over more than nine decades of design practice delivering projects that solve real problems. Uncovering innovative solutions is the result of Clark Nexsen’s collaborative process undertaken with their clients to discover truly exceptional ideas. Clark Nexsen has been a sponsor of LDDI since 2011. Allyson Monsour, Senior Civil Engineer in the Virginia Beach, VA office, currently serves on the LDDI Advisory Board and co-chairs the LDDI Research and Development Committee.



Contech Engineered Solutions

For more than a century, Contech has provided innovative, cost-effective site solutions to engineers, contractors, and developers on projects across North America. With a portfolio that includes bridges, drainage, erosion control, sanitary

sewer, and stormwater management products, the Contech team is ready to help design, build, and support your next project. Contech ES has been a sponsor of LDDI since 2011, and in 2018 upgraded their sponsorship to the Platinum level. For more information visit www.conteches.com or call 800-338-1122.



Dewberry

Dewberry is a leading, market-facing firm with a proven history of providing multidisciplinary professional services to a wide variety of public- and private-sector clients.

Established in 1956, Dewberry is headquartered in Fairfax, Virginia, with more than 50 locations and 2,000 professionals nationwide. Dewberry has been a sponsor of LDDI since 2007. Jack Vega, Vice President; Skip Notte, Vice President and Business Unit Manager; and Cameron Palmore, Associate/Sr. Project Manager serve on the LDDI Advisory Board.



Draper Aden Associates

Draper Aden Associates was founded in 1972 with an office in Blacksburg, Virginia and now has eight offices located across Virginia and North Carolina. They are a full service consulting engineering firm offering services in site planning and engineering, sustainable design, infrastructure, geotechnical engineering, structural engineering, environmental services and surveying. Draper Aden Associates has been a sponsor of LDDI since 2007. Firm president and CEO Jeff Lighthiser is a previous Chair of the LDDI

Advisory Board and is a Life Member of the LDDI Advisory Board. Senior Project Manager, Caleb Hurst, is an active member of the Board.



Edens Land

Edens Land, founded in 2004, is a privately owned civil engineering and landscape architecture consulting firm located in Durham, NC. The professionals at Edens Land are committed to delivering a high quality work product while providing exceptional service. Edens Land provides creative solutions that are technically sound, cost effective and environmentally sensitive. 2018 marked the company's inaugural year as an LDDI Platinum-level sponsor.



GORDON

Founded in 1976, GORDON is an award-winning, multi-discipline design firm specializing in urban design, mixed-use, commercial and government facility development. In addition to designing some of the most complex private

developments in the Washington DC Metro region, the firm serves federal agencies such as the Department of Veterans Affairs, U.S. Army Corps of Engineers, and National Institutes of Health nationwide. GORDON offers a full complement of civil engineers, land planners, landscape architects, surveyors, and security professionals. The firm has been a sponsor of LDDI since 2007 and proudly employs over twenty Virginia Tech alumni. In April 2019, firm COO Bill Junda took over as Chair of the LDDI Advisory Board. In addition, firm CEO Hank Gordon is on the LDDI Platinum Board.



J2 Engineers

Founded in 2007 by Jim Bishoff and Jeff Gilliland, J2 Engineers was built to be different: a different approach to engineering and landscape architecture, a different employer for talented employees, a different niche in the marketplace. J2 focuses on client goals, excellence in engineering, and a positive work culture. Growing exponentially, the firm provides top-quality service that is thorough and innovative. Strong relationships, start-to-finish involvement, and unlimited potential guide J2. This vision shapes an environment where clients like to do business and where employees love coming to work. J2 Engineers is a proud sponsor of LDDI, since 2007, and Gilliland is past Chair and Life Member of the LDDI Advisory Board.



Kimley-Horn and Associates, Inc.

Kimley-Horn was founded in North Carolina in 1967, and during the past 52 years has grown to include more than 80 offices in 28 states. The firm has been repeatedly recognized as a top place to work, and provides an array of planning, engineering and design consulting services including land development, transportation, water resources, and more. Kimley-Horn has been a sponsor of LDDI since 2007. Derrick Cave, Principal and Senior Vice President, is a Life Member on the LDDI Advisory Board and also serves on the LDDI Platinum Board. Kyle Bollinger, Associate, serves as an active member on the LDDI Advisory Board.



Maser Consulting

Maser Consulting P. A. is a privately owned, multi-discipline engineering firm with a unique balance of public and private sector experience. Committed to customer service and accountability, Maser Consulting's experienced staff of licensed engineers, planners, surveyors, landscape architects and environmental scientists have a proven ability to



add value to the community by delivering quality services and strategies needed to meet its clients' undertakings. Established in 1984, the firm has offices nationwide and has consistently been recognized by Engineering News Record as one of its Top 500 Design Firms, and ranks on The Zweig Group's Hot Firm List of fastest growing companies. Maser Consulting has been a proud sponsor of LDDI since 2012, and Regional Geographic Discipline Leader Jonathan Jolley is an active member of the LDDI Advisory Board.

McAdams

McAdams is a full-service land planning, landscape architecture, civil engineering and geomatics firm located in Durham, Raleigh and Charlotte, North Carolina and Dallas-Fort Worth, Texas. McAdams has built its reputation throughout the industry over 40 years by delivering unmatched expertise and unwavering commitment to clients in a variety of markets including municipal, education, healthcare, as well as commercial and residential development. The firm is comprised of over 250 professionals that are united in their desire to achieve their clients' visions through a thoughtful and resourceful process. Ultimately, McAdams seeks a partnership with their clients to further the opportunity to create meaningful experiences through inspired design. McAdams has been a sponsor of LDDI since 2018, and Charlotte Region Director Rob Reddick serves on the LDDI Advisory Board as an active member.



Tri-Tek

Tri-Tek Engineering was founded in 1988 by Kevin Murray and Ted Britt. To this day, both are actively involved in the firm's projects and they remain personally accessible to the firm's clients. Tri-Tek believes that "doing things according to plan" is not just a slogan, it's a reflection of their commitment to client service, design creativity, and professional integrity. Headquartered in Herndon, Virginia, the company provides a wide array of civil and environmental engineering services for both public and private clients. Tri-Tek Engineering has been a sponsor of LDDI since 2011, and this year marks the firm's second as a Platinum-level sponsor. Firm founder, Kevin Murray, is an active member of the LDDI Advisory Board and former Chair of LDDI's Practitioner Involvement Committee.



WithersRavenel

WithersRavenel is the largest NC employee-owned, multi-disciplinary design firm specializing in the planning, design, and construction of public and private projects. The firm offers expertise in environmental engineering, geomatics, land development and planning, management and transformation, landscape architecture, construction administration, stormwater, and utilities. WithersRavenel transforms vision into reality and builds projects and relationships that reflect shared values of quality, integrity, sustainability, community, and respect. 2018 marked WithersRavenel's inaugural year as an LDDI Platinum-level sponsor.



2018-2019 General Meetings

This past year, LDDI continued its long tradition of hosting a winter meeting in Northern Virginia and a summer meeting in Richmond. In April, LDDI also hosted its second thematic General Meeting in Charlotte, North Carolina. LDDI's General Meetings are a key outreach effort that help keep sponsors and other professionals in the land development industry up to speed on the status and future direction of the LDDI program. The meetings also provide a great opportunity to showcase students, update our general membership on campus happenings, and solicit feedback and ideas on how to continually improve the program. Meeting attendees are provided not only with a tremendous industry network opportunity, but also two valuable continuing education/professional development credits. Last year's summer meeting was held at the Hardywood Park Craft Brewery in Richmond, while the January winter meeting was held at the Herndon Town Council Chambers. For the second consecutive year, the Charlotte meeting was held at Dewberry's office in the city.

The Richmond summer meeting was held on Friday, July 20th, 2018 and featured guest speakers Matthew Ryan and Todd Kilduff (Goochland County) and Mark Boyd and Kelsey Westwood (Kimley-Horn Associates). Ryan and Kilduff spoke about ongoing economic development efforts in Goochland County, and how those efforts provide opportunities for the land development industry. Boyd and Westwood spoke about the development of the Hardywood Park Craft Brewery (the host venue). The meeting agenda also included CEE 4274 student presentations, an LDDI update by Program Coordinator, Dr. Randy Dymond, and a networking social.

LDDI's annual winter meeting was held on Friday, January 11th, 2019 at the Town Council Chambers in Herndon. Much like the summer meeting, attendees were comprised of a diverse mix of consultants, developers, product and service providers, municipal engineers, and other professionals from the land development industry. The theme of the 2019 winter meeting was "Smart Cities – Infrastructure and Land Development," and featured a panel of guest speakers that



Dr. Steven McKnight speaks to attendees at the January 2019 LDDI General Meeting

included Bill Ashton (Town of Herndon), Jennifer Krusius (Columbia Capital), James Patteson and Eta Davis (County of Fairfax), Julie Manzari (Dominion Energy), Joe Viscuso (Pennoni), and Steve Wray (Econsult Solutions, Inc.). Attendees were also treated to a surprise presentation on the new Virginia Tech Innovation Campus by Dr. Steven McKnight, VP of the Virginia Tech National Capital Region.

On Friday, April 12th, 2019, LDDI hosted a General Meeting in the City of Charlotte. This meeting marked the second consecutive spring General Meeting held in Charlotte, and the third event held in the city overall, following a smaller outreach meeting hosted in the spring of 2017. The meeting drew an audience of North Carolina professionals, which included a mix of attendees, some of whom were hearing about LDDI for the first time. In addition to student presentations and a program update, the meeting featured a thematic presentation and discussion of new stormwater regulations in North Carolina governing redevelopment projects. Guest speakers included Don Ceccarelli (Charlotte-Mecklenburg Stormwater Services), Jordan Miller (City of Charlotte) and Daniel Hines (Bohler Engineering).

2018-2019 Financial Summary

During the 2018-2019 fiscal year, LDDI collected revenue of approximately \$273,000 through its corporate sponsorship and municipal membership program, individual donations, and various fundraising endeavors. This figure reflects the support of 50 corporate sponsors and municipal members – our highest number ever! Similarly, personal donations to the program are at an all-time high, with nearly 100 unique donors making contributions to LDDI. Revenue collected during FY 2018-19 was used to directly support LDDI activities inside and outside of the classroom (including salary support for LDDI course instructors), and to work toward funding an endowment to ensure long-term program sustainability and growth. The following describes some of LDDI's major expense categories to which collected revenue was directed.

Instructor Compensation: Of the eight LDDI course-sections offered each year at Virginia Tech, the University provides financial support for only four. Corporate sponsorships fund the remaining four in their entirety.

Endowment: In an ongoing effort to ensure the long-term sustainability the LDDI Program, the Advisory Board has ramped up efforts to establish an endowment fund. The funding of an endowment will permit the hiring of additional tenure-track faculty that are essential for LDDI's long-term survival and recognition as a program area within the broader CEE program. Currently, all individual donations to LDDI are routed to the endowment fund.

Program Expenses: Program expenses include support for LDDI's student club, including field trips, travel to service project locations, and social gatherings. This expense category also includes event catering for LDDI general and outreach meetings, publication of the *LDDI Bridges* quarterly newsletter, and past funding of the LDDI student internship program.

Operations Expenses: Operations expenses include general overhead costs such as postage, printing and copying, website development and maintenance, telecommunications, and University accounting and service fees.

Travel and Meetings: LDDI now hosts three general membership meetings each year. Outreach efforts such as these comprise a critical part of LDDI's efforts to ensure continued practitioner participation in the program.

Endowment Update

LDDI remains eternally grateful for the past, current, and future financial support of our corporate sponsors and municipal members. However, a budget model that relies solely on funding from annual sponsorships is not sustainable in the long term as it is vulnerable to economic downturns and affords no opportunity for program growth. The inability for the LDDI program to grow is at odds with ever-increasing market demand for LDDI graduates and rapidly growing enrollment at Virginia Tech. An Endowment Campaign is currently underway to fund growth of the LDDI program through an endowed principal fund, allowing LDDI to draw interest from the principal to expand. The current endowment goal is \$10 Million, which would provide to the program an annual anticipated revenue of approximately \$420,000. Over the past two years, significant progress has been made toward this goal, both in terms of increasing the number of individual donors as well as securing larger, multi-year pledges from companies and other organizations. At this time, we wish to recognize and thank the following firms and individuals for their belief in the LDDI program and their ongoing, multi-year pledges of financial support directly toward the LDDI endowment:

- Pennoni: \$25,000/year for 5 years
- Bohler Engineering: \$12,500/year for 3 years
- Van Metre Homes: \$5,000/year for 3 years
 - Gordon: \$5,000/year for 3 years
- Anonymous Donor: \$5,000/year for 3 years
- Mr. Bill Junda: \$2,000/year for 3 years

LDDI's endowment efforts also receive a boost over a 24-hour period spanning March 19-20, during which Virginia Tech held its second annual Giving Day. These events are 24-hour online fundraising challenges that universities and other groups hold to raise donations by drawing together and inspiring alumni, students, faculty, staff, and all members of the affiliated community. During last year's Giving Day, in excess of \$1.6 million was raised across the university, with \$9,100 directed to LDDI by various donors. The 2019 Giving Day raised over \$2.8 million university wide, with \$13,000 earmarked by donors for LDDI. This year's LDDI Giving Day total was aided by a generous challenge match put forth by Mr. Paul Johnson, with Paul offering to match all donations to LDDI up to \$5,000. We thank all of you who gave so generously to LDDI on Giving Day 2019, and offers a special thank you to Paul for his longtime belief in and support of the program!

All individual donations made to LDDI on Giving Day (and at any other time throughout the year!) are directed to the LDDI endowment fund.

Curriculum and Course Enhancement

Prior to creation of LDDI, students at Virginia Tech had only one land development design course offering available to them (CEE 4274, Land Development Design). Today, LDDI funding supports a total of five individual courses focused on Land Development design. These five courses comprise the most expansive undergraduate land development design curriculum in the entire country. As a direct result of LDDI's efforts over the past thirteen plus years, we are confident in saying that Virginia Tech CEE graduates have a better foundation for a career in land development design than students from any other university!

In April, christopher consultants' Andy Gorecki was named Chair of LDDI's Curriculum and Course Enhancement Committee, replacing Eden & Associates' Meredith Jones who has served in this role for the past two years. The following section briefly summarizes the courses comprising the LDDI curriculum, as well as some exciting news regarding LDDI faculty.

Introduction to Land Development (CEE 3274)

CEE 3274 first emerged on the radar of Virginia Tech CEE students in the spring of 2008 when, facilitated through LDDI, it was held as a one-credit seminar by local practicing engineer Mary Ann Bonadeo. The first three-credit offering of CEE 3274 resembling its present format was taught in the fall of 2009 by LDDI Assistant Coordinator Kevin Young. This inaugural offering caught the attention of 15 curious CEE students – a far cry from the course's peak enrollment of 120 students in a single section! CEE 3274 is now an incredibly popular course entrenched in the CEE curriculum, with two sections routinely offered in both the fall and spring semesters.

CEE 3274 was developed to serve two primary functions within the broader LDDI program. First was to introduce and acquaint students with land development as a viable career path while they are being exposed to introductory courses in other "traditional" CEE subject matter such as

transportation, structures, geotechnical, and water resources. Second was to better prepare students wishing to pursue advanced courses in land development, including the senior design course, CEE 4274. In 2010, CEE 3274 became a formal prerequisite for the senior design course and the course's material content and chronology settled into its current format. The course now spans a diversity of topics including global population trends and political issues that impact the land development industry, land planning and zoning, and more traditional CEE subject matter such as grading and roadway design, design of public utility systems, stormwater management, and erosion and sediment control.

During its evolutionary first two years, LDDI Coordinator and Assistant Coordinator Randy Dymond and Kevin Young alternated semesters teaching CEE 3274, before Young eventually settled in as the lone course instructor until 2016. In the fall of 2016, coinciding with the hiring of Assistant Professor of Practice Claire White, a second section of the course debuted. Now, White and Young each teaches a section of the course in both the fall and spring semesters, permitting as many as 260 students to enroll in the course in any given academic year (and, yes, they've gotten close to that number!).

Land Development Design (CEE 4274)

LDDI's "hallmark course", CEE 4274, remains tremendously popular despite students being well aware of its demanding workload and time commitment! Beginning in the fall 2006 semester, students taking CEE 4274 have been paired with engineers from LDDI sponsoring firms who serve as their mentors on a semester-long design project. LDDI would like to thank the individuals from the following firms for their time and energy to serve as mentors to CEE 4274 students during the 2018-19 academic year:



Clark Nexsen's Allyson Monsour and Lewis Hutchins meet with their CEE 4274 student design team early during the spring '19 semester

ATCS
Bohler Engineering
Bowman Consulting
christopher consultants
Clark Nexsen
Dewberry
Draper Aden Associates

Edens Land
Gordon
J2 Engineers
Maser Consulting
Tri-Tek Engineering
WithersRavenel

Municipal Engineering (CEE 4254)

Since its establishment in the LDDI curriculum in 2010, CEE 4254 – Municipal Engineering, has been traditionally only offered during the spring semester of alternating years. Spring 2019 marked the first time that the course was offered in back-to-back spring semesters, and the course's enrollment of 48 students quickly removed any questions that may have existed regarding the value of offering the course with this increased frequency! The spring 2019 semester marked the second time teaching the course for Mr. Randy Formica (Director of Engineering and GIS, Town of Blacksburg). Randy was assisted in course organization and design by James Patteson (Fairfax County Director of Public Works and Environmental Services) and Dr. Randy Dymond (LDDI Coordinator). The course focused on familiarizing students with the role of the municipal engineer, and the important relationship that exists between municipal engineers and the land development industry. The course included many guest speakers and 12 municipal engineering mentors who worked directly with students on projects. Given the popularity of the spring 2019 offering, LDDI plans to continue offering the course each spring semester.

Sustainable Land Development (CEE 4264)

Sustainable Land Development was first offered during the spring 2008 semester as a one-credit seminar. Much like the initial seminar offering of CEE 3274, the immediate popularity of the course among students served as a catalyst to rapidly expand the course to a full three-credit offering. The course continues to be very popular with students and the fall 2018 offering was no exception with an enrollment of 52 students! It is important to note that enrollment in the course is restricted to only those students with senior standing; however, students from *any* major may enroll. The intent of this arrangement is to introduce various perspectives to classroom discussion and better prepare students for careers where they will inevitably cross paths with professionals from a diversity of academic backgrounds. That being said, the course is incredibly popular among CEE students and these students dominate course enrollment. Taught by LDDI Coordinator, Dr. Randy Dymond, the Sustainable Land Development course focuses on the developed site's long term sustainability and preservation of the pre-development quality of its environment. Specific topics include site selection and linkage; neighborhood pattern and design, development impacts on water, air, and soil; microclimate; industrial ecology and materials; energy; and incentive driven sustainability efforts. The course also introduces students to third party site evaluation methods including Leadership in Energy and Environmental Design for Neighborhood Development (LEED ND), Envision, and Earthcraft Communities. Students visit development projects employing innovative, sustainable design features and a number of outside guest speakers give interesting presentations.

Advanced Land Development Design (CEE 4284)

Since its first offering to students in 2007, CEE 4284 – Advanced Land Development, has been taught during the spring semester of alternating years, and prior to 2019 was last taught during the spring 2017 semester. The course is unique in the CEE curriculum in that it is taught by teams of professional engineers from LDDI sponsoring firms. The course is also unique in that it meets on Friday nights and Saturday mornings, rather than in a more traditional

Monday/Wednesday/Friday or Tuesday/Thursday academic format. This arrangement is necessary to accommodate the schedules of the industry professionals serving as course instructors, many of whom are traveling from several hours away to teach! The spring 2019 offering of the course featured instructors from Bohler Engineering, Draper Aden Associates, and Kimley-Horn & Associates. When CEE 4284 was first developed, the course focused on site grading and ADA requirements, storm sewer design and basin routing, and erosion and sediment control. Students are now being introduced to many of these topics in CEE 3274 and again, in the context of a design project, in CEE 4274 (which serves as a pre or co-requisite for CEE 4284). Through the growth and evolution of the LDDI curriculum, the CEE 4284 course now permits coverage of even more advanced land development topics, including but not limited to:

Site Selection, due diligence, and land entitlements

The Virginia Runoff Reduction Method

Design-build and non-traditional project delivery methods

Infill development and development challenges in urban environments

Public Private Partnerships and other unique project types

LDDI offers a sincere thank you to the dedicated industry professionals from Bohler Engineering, Draper Aden Associates, and Kimley-Horn & Associates who gave so generously of their time to teach the spring 2019 offering of CEE 4284. Advanced Land Development Design will next be offered in the spring of 2021.

Student Impressions of the LDDI Program

The core mission of LDDI is to produce civil and environmental engineering graduates who are not only aware of the career opportunities in land development, but prepared to hit the ground running in this exciting and ever-changing field. The following are testimonials from graduates of the LDDI curriculum.

“The LDDI program has given me an incredible wealth of knowledge and an extensive professional network that have prepared me for my career infinitely more than I could have hoped. The classes, the professors, and the extra activities that are provided made the LDDI program so valuable to me. While taking both CEE 4274 and CEE 4284, I gained specific real-world experience from practicing engineers that allowed me to take what I have learned in the classroom and build on it to prepare me for the sort of problems I will be facing in my career. The professors are great part of the program because they genuinely care about the student’s success. Whether it is talking about career options or working on extra projects, they are always available to help.” – Casey Britt, CEE ’19, Project Engineer, Rinker Design Associates

“The LDDI program introduced me to a discipline I otherwise never would have known about and provided me with valuable knowledge and experience to kickstart my career. For me, it began with the Municipal Engineering and Sustainable land development courses providing an in-depth look at topics which don’t get taught in general engineering courses or during internships. The knowledge and experience I gained through the senior design course and being able to work with industry professionals on real projects was invaluable. The LDDI program is unlike anything else Virginia Tech has to offer.” – Franklin Heinzmann, CEE ’19, Staff Professional, WithersRavenel

“The LDDI Program was a large part of what made my experience at Virginia Tech so special and I am extremely grateful to have had the opportunity to be involved in it. The Intro to Land Development class sparked my interest in the industry and the Senior Design Class helped give me the tools to succeed after graduation. Working on real projects alongside industry professionals is an invaluable experience that gave me skills I could not have gotten in any other class.” – Matthew Koop, CEE ’19, Staff Engineer, Bohler Engineering

“Sustainable Land Development and Land Development Design are courses that have given me irreplaceable real-world experience within an academic setting. Every assignment involved overcoming obstacles and solving scenarios often seen in a professional setting. In CEE 4274 I had the ability to be critiqued by both a professional mentor and a professor. Having access to double the amount of feedback allowed me to quickly grasp the common practices of this industry.” – Caitlin Pendergast, CEE ’19, Civil Engineer Designer, Cowen Design Group

LDDI Coordinator Receives Award

At the College of Engineering Dean's Awards, held on May 9th, LDDI Coordinator Dr. Randy Dymond was awarded the W.S. "Pete" White Innovation in Engineering Education Award. This award, established in 2003, recognizes "faculty who excel in the development of courses that incorporate both technological and pedagogical innovation." While Dymond's two decades plus at Virginia Tech have impacted countless students across a variety of subject matter,



Dr. Randy Dymond with Dean, Dr. Julia Ross, at the 2019 College of Engineering Dean's Awards

this award particularly recognizes his innovative approach to education that has helped to steer and elevate the LDDI program to the prominence it now enjoys. Of Dymond's leadership and contributions to LDDI and Virginia Tech, LDDI Advisory Board Life Member Bob Jansen offered, "I have worked with Randy since LDDI's inception back in late 2005/early 2006 and since that time I have witnessed his dedication, innovation and leadership to guide and expand the program to what it is today. I believe it has been Randy's extraordinary people skills which have bridged the academic world with the land development industry to collaborate on such a unique program. I was thrilled to see him get recognized for these efforts by recently receiving the College of Engineering's W.S. 'Pete' White Innovation in Engineering Education Award." Congratulations, Randy!

Claire White Serves as Editor for Land Development Handbook

First released in 1995, Dewberry's Land Development Handbook has become one of the most widely recognized and referenced publications in the land development design profession. More than 40,000 copies of the first three editions of the text have been sold, and it can be found on the desks of professionals and students across the United States. Indeed, it has been a required resource for students in LDDI's senior land development design course since the program's inception. Earlier this spring, the fourth edition of the handbook was released, with the most recent edition expanding into three separate books: Land Development Handbook (4th Edition), Development of the Built Environment, and Construction Practices for Land Development. This recent publication provided an opportunity for former LDDI student and current Virginia Tech CEE Assistant Professor of Practice Claire White, who was invited to serve as Editor on the Construction Practices for Land Development book.

Working alongside Editor in Chief, Mr. Sid Dewberry, White set out to develop the text such that it went beyond what is presently available in the realm of construction management and the construction manager's responsibility, and focused more expansively on the design engineer's role during construction. Of her involvement in developing the text, White states, "I admire Mr. Dewberry's dedication to advancing the



Claire White and Sid Dewberry celebrate the release of the fourth edition of the Land Development Handbook

land development profession as evidenced by his work on the Land Development Handbook. It was an honor to work with him and the rest of the team on this latest edition. I hope Construction Practices for Land Development will be a key resource for professionals and students alike just as the Land Development Handbook has been for the last 25 years. In particular, I hope this text helps new engineers, as there are many topics in this book I wish I had better understood early in my career."

Practitioner Involvement Committee Update

The major objective of LDDI's Practitioner Involvement Committee (PIC) is to develop a strong and sustainable relationship between all sectors of the land development profession and the students within the Via Department of Civil and Environmental Engineering. This mentoring and social interaction helps prepare students for a career in the land development design industry and also assists them in beginning to build a network of professional contacts. In April, Gay & Neel's Josh MacDonald was named Chair of LDDI's Practitioner Involvement Committee, replacing Tri-Tek's Kevin Murray who has served in this role for the past two years.

Many Practitioner Involvement activities occur through LDDI's student arm, the Sustainable Land Development Club (SLDC). Under the guidance of faculty advisor Kevin Young, and working closely with the LDDI Advisory Board, the SLDC brings together students with a common interest in sustainability as it relates to land development design. Senior Barrett Terrell and junior Lucy Travers provided student leadership for the SLDC this year, serving as co-presidents. The following section describes some of the PIC/SLDC activities during the 2018-19 academic year.

On Campus Product Exhibitions

LDDI has long recognized the value of getting students out of the classroom and out into the real world to observe and study the construction, installation, and maintenance of the infrastructure that they will ultimately design. The logistics of getting multiple sections of a junior-level course, each with 65 enrolled students, out on a traditional field trip are daunting. Similarly, group design projects and job interviews place demands senior students that are often prohibitive for “destination” field trips. This past year, LDDI, with the help of its Diamond-level sponsors Advanced Drainage Systems (ADS) and Concrete Pipe & Precast (CP&P), took this challenge head on and brought the field trips to the students! On a picturesque fall day in October, on the lawn behind Goodwin Hall on the Virginia Tech campus, ADS brought in a truck loaded with their innovative stormwater management products. In April, CP&P visited campus with a whole host of storm and sanitary infrastructure products that students studied, asked questions, and learned about. Dozens of students passed through the two sessions, and it was fun to watch them look curiously at pipes, manholes, inlets, and other structures that they may have before only viewed schematically on a computer screen or on a set of design plans. LDDI wishes to thank ADS and CP&P for giving so generously of the time of their salesmen, engineers, and truck drivers to come to campus, and we look forward to making these exhibitions an annual event!



Students get acquainted with corrugated pipe at the fall '18 on-campus product exhibition by ADS



A student snaps a “stormwater selfie” at the spring '19 on-campus product exhibition by CP&P

Career Nights

This year, LDDI and the Sustainable Land Development Club (SLDC) continued their tradition of hosting a “Land Development Career Night” on the eve of the Civil & Environmental Engineering career fairs. This was the 20th and 21st consecutive semesters that a student-practitioner mixer of this type has been held by LDDI. The fall event was extremely well attended by both practitioners and students, and while the spring mixer is never as busy as its fall counterpart, it still provided an unprecedented networking opportunity. These career nights are beneficial for both the students and practitioners for numerous reasons, perhaps none more important than providing an opportunity for students to meet and mingle with prospective employers in a relaxed atmosphere prior to the inherently stressful and hectic atmosphere of the career fair. The casual setting of the Hokie House provides opportunities not only for career networking, but for many practitioners to reminisce on their time as a student at Virginia Tech.

Design Charrette and Competition

This spring, LDDI hosted its seventh annual Design Charrette Challenge, which was led for the fifth time by Dewberry's Skip Notte. The competition followed a familiar format, in which Skip begins by providing the student contestants with an introduction to the site, the development goals, and any unique caveats or limitations on their design. Following this introduction, student teams are given one-hour to work toward a design that meets the development objective while also adhering to relevant codes and sound design principles. Dinner was provided to the student participants while their designs were judged by Notte, CEE faculty members, and LDDI PIC Chair Josh MacDonald (Gay & Neel). In total, 29 students participated in the contest, and the top team of Casey Britt and Michael Lanza took home a \$100 gift card to Buffalo Wild Wings!



VT CEE Asst. Professor of Practice Claire White with the 2019 LDDI Design Charrette and Competition winning team of Casey Britt and Michael Lanza

Value Engineering Session

Late during the fall 2018 semester, the success and popularity of LDDI's annual Design Charrette and Competition served as a catalyst for LDDI Advisory Board Life Member Jeff Gilliland (J2 Engineers) to reach out to SLDC faculty advisor Kevin Young with an idea to hold the first of what he hopes will become another hands-on, annual SLDC event. The session, which Jeff ultimately titled "A Practical Exercise in Value Engineering" was held in early February, and was attended by more than 20 students. Following an overview of the history, principals, and approach to value engineering, students broke up into 3-4 member teams to apply those principals on a public school site for which Jeff provided full-sized maps showing topographic and planimetric information. Students were provided with "paper



Jeff Gilliland (J2 Engineers) looks on as a student team describes their design rationale during a hands-on value engineering workshop

doll” cutouts of parking lots, athletic fields, and other proposed features that they used to develop conceptual layouts of the site. The teams then presented the rationale behind their proposed layouts, opening themselves to feedback and critique from Jeff as well as the other student teams. The session proved to be a lot of fun, and generated some very insightful observations and recommendations from the students as they applied the concepts of value engineering to their own layouts and those of their peers. Jeff and Kevin took note of what went well and what can be improved upon, and they are looking forward to holding another hands on value engineering workshop in the coming academic year.

Service Projects

During the 2018-19 academic year, the SLDC continued its partnership with Across the Way Productions, the group responsible for organizing Southwest Virginia’s annual FloydFest music festival. From quite modest beginnings in 2002, FloydFest grew rapidly during its first decade of existence. This rapid growth presented festival organizers with numerous challenges, including site layout, the shuttling of patrons into and out of the festival grounds, and ensuring that festival staff were able to respond quickly in the event of an emergency. In past years, SLDC members developed a series of site maps to help festival organizers better address some of these logistical challenges, and current SLDC members provide ongoing maintenance and updates to these maps. SLDC members have also applied their design talents, working closely alongside festival staff, to develop layouts that maximize the number of parking spaces available to attendees, and that help to more efficiently allocate space to vendor booths and other event amenities. More recently, the SLDC has worked with Across the Way Productions on other festivals and events, including the Vintage Virginia Wine Festival and the summer concert series in Roanoke’s Elmwood Park.

As graduates of the LDDI program will recall, before students may begin taking LDDI courses, they must complete a required sophomore course titled CEE Measurements that includes a rigorous surveying lab component. SLDC members used the surveying skills developed in this course on a number of projects this past year, two of which involved working with graduate students in the College of Architecture and Urban Studies to assist them with various surveying tasks on projects in the City of Radford and the Town of Blacksburg. In April, for the seventh consecutive year, SLDC members provided stakeout surveying of the track for Virginia Tech’s annual Relay For Life Event – the largest collegiate Relay event in the entire world!



SLDC students stake out the track for the 2019 Virginia Tech Relay For Life

Philanthropy

During the fall 2017 semester, the SLDC embarked on its first charitable fundraising endeavors, a cornhole tournament that raised over \$300 for *Save the Children's* hurricane Maria relief efforts in Puerto Rico, and a drive that collected more than \$700 worth of food for a local food bank. With both students and LDDI faculty motivated by the success of these efforts last year, early in the fall 2018 semester, SLDC faculty advisor Kevin Young recruited a group of students and tasked them with identifying local organizations for whom they felt the SLDC could make the biggest, positive impact. Once these organizations were identified, Young further tasked the students with creating fundraising events and activities and promoting those events to their classmates and other friends. The students responded to the challenge, and over the past year the SLDC is proud to have made food and monetary donations to Micah's Backpack, The Giving Tree Food Pantry, and the Interfaith Food Pantry. The donations to these organizations were made possible through a food collection drive that spanned the entire 2018-19 academic year, a fall cornhole tournament fundraiser, and a "percentage night" held at one of Chipotle's Blacksburg restaurants, during which 33% of the proceeds collected by the restaurant went to the SLDC for distribution to the various charities.



SLDC President Lucy Travers makes a food delivery to The Giving Tree Food Pantry during the fall '18 semester



SLDC members held a fall cornhole fundraiser and a spring semester "percentage night"

CAUSE AN EFFECT



Make dinner a selfless act by joining us for a fundraiser to support Sustainable Land Development Club. Come in to the Chipotle at **314 North Main Street** in Blacksburg on **Sunday, March 3rd** between **5:00pm** and **9:00pm**. Bring in this flyer, show it on your smartphone or tell the cashier you're supporting the cause to make sure that 33% of the proceeds will be donated to Sustainable

Land Development Club.



Field Trip

In April, LDDI Assistant Coordinator Kevin Young led a group of students on a field trip to Williamsburg and Richmond where they toured land development projects hosted by LDDI sponsors AES Consulting Engineers, Draper Aden Associates, and VHB. Having long recognized the importance and educational value of getting students out of the classroom and onto active job sites, this spring's field trip marks the seventh such overnight, out-of-town field trip. By visiting development projects in the various regions of Virginia, including NOVA, Richmond, and Tidewater, students gain insight into site conditions that are significantly different than those found on and around the Virginia Tech campus. This year's field trip began with a tour of the 40,000 square foot building expansion and associated site and utility work at The Art Museums of Colonial Williamsburg. This site tour was hosted by Draper Aden Associates' Tyson Catlett, a former LDDI student and the SLDC's first student president! After leaving the museum site, Young and the students traveled to the Midtown Row commercial development in Williamsburg, where they met site hosts Graham Corson and Erica Engelhard from AES Consulting Engineers. Here, the students walked the site and observed large grading operations, the installation of various subsurface infrastructure, and other ongoing construction activities. After leaving Williamsburg, the group traveled to downtown Richmond where they met site host Becca Ruiz (VHB) to tour the General Assembly Building/Capitol Square project. Here, students observed impressive structural engineering challenges, but also more conventional site development features such as underground stormwater detention and an offsite sanitary sewer extension. The field trip, like those before it, proved to be immensely educational for the students, and LDDI wishes to thank AES Consulting Engineers, Draper Aden Associates, and VHB for serving as this year's hosts!



Draper Aden Associates' Tyson Catlett talks to students at the Art Museums of Colonial Williamsburg site



AES' Graham Corson describes an ADA-compliant sidewalk at the Midtown Row project in Williamsburg



Students pause for a photo with host Becca Ruiz (VHB) at the General Assembly/Capitol Square project in downtown Richmond

LDDI Students Are Recognized

This April, for the fifth consecutive year, LDDI recognized some of the outstanding students in the LDDI program. As you have likely heard, enrollment at Virginia Tech is exploding rapidly, particularly in the College of Engineering. As a result, most LDDI courses typically have enrollments ranging from 40 - 70 students. There are many outstanding students in the LDDI curriculum, and for a student to distinguish him or herself among their peers from within these large class sizes is truly commendable. It is with a great deal of pride that we recognize the following students for the 2018-19 academic year.



LDDI Assistant Coordinator Kevin Young presents Barrett Terrell and Lucy Travers with the 2018-19 LDDI Hokie Stone Awards

Hokie Stone Award: This award is given annually to the LDDI student who is as solid as its namesake – a team player whose leadership, attitude, and personality elevate the performance of all those around them. This year, two Hokie Stone awards were given to recognize the outstanding contributions of SLDC co-presidents Barrett Terrell and Lucy Travers. This marks the second time that Terrell has been recognized with this award for his leadership as SLDC president. The past two years have been the most active to date for the SLDC, and club faculty advisor Kevin Young states, “it would have been impossible for me to manage all of the various SLDC activities without Barrett there to assist me at every step along the way. I’ll miss his club leadership as he begins his career with LDDI sponsor AES Consulting Engineers, but I’m thankful for the heights to which he’s helped me to elevate the SLDC.” Travers was named co-president of the SLDC in January, and worked closely alongside Terrell and Young on many club activities during the spring semester, and looks forward to taking the reins on her own this fall!

Leadership in Sustainability: The Leadership in Sustainability award is given annually to recognize an LDDI student with a commitment to sustainability as it relates to land development design. This year’s recipient of the Leadership in Sustainability award is Laura Burger. During the fall 2018 semester, Laura consistently proved herself to be one of the strongest performers in Dr. Dymond’s Sustainable Land Development course. At the same time, Laura was also enrolled in LDDI’s senior design course, CEE 4274, and demonstrated outstanding proficiency across all course material. Further illustrating her commitment to issues of sustainability, Laura was a key member on the Virginia Tech Wind Turbine team, which achieved a second place finish in the Collegiate Wind Competition in Boulder, CO in June. Laura begins her career this summer with LDDI sponsor Bohler Engineering.

CEE 4274 Female Student of the Year: This award is given annually to the exceptional female student in the fall and spring offerings of CEE 4274. During the fall 2018 semester, working

under the mentorship of a team of engineers from Draper Aden Associates, Casey Britt and her teammates consistently produced some of the strongest design submittals in the entire course. While the entire student team functioned at a very high level as a group, Casey's leadership and commitment to professionalism was impossible to ignore. Casey and her teammates' efforts in the course resulted in an invitation to present their design project at both the 2019 LDDI winter meeting in Northern Virginia and the 2019 LDDI spring meeting in Charlotte, NC. Of working with Casey in CEE 4274, her mentoring team from Draper Aden Associates offered the following comments, "Casey brought an impressive skill set and understanding of civil engineering to the design course. Casey and her team managed their time and workload well, asked great questions, and consistently produced superior work. We look forward to seeing Casey do great things in the civil engineering profession!" Casey will begin work later this summer with LDDI sponsor Rinker Design Associates.

CEE 4274 Male Student of the Year: This award is given annually to the exceptional male student in the fall and spring offerings of CEE 4274. During the fall 2018 semester, working under the mentorship of a group of engineers from Bohler Engineering, Ian Long was a member of a student group that consistently met and exceeded expectations for the course. Throughout the course, Ian demonstrated impressive attention to detail and a relentless pursuit of perfection. It goes without saying that Ian was an integral part of his design team's sustained, outstanding effort throughout the course, and of working with Ian his mentoring team from Bohler offered the following, "Ian is a bright, hard-working, and passionate young engineer who constantly strives to learn and improve. His determination and passion for growth and improvement is evident in his quality of work, his attitude, and his ability to overcome challenging obstacles. Ian is a driven young man that will clearly be a valuable addition to our industry and specifically the Bohler family." As noted in the quote, Ian is set to begin his career with LDDI sponsor Bohler Engineering.

At this year's award ceremony, we also recognized Paul Miller, who over the past year served as a GTA in multiple LDDI courses, as well as serving as the student representative to the LDDI Advisory Board. Despite navigating the entire academic year on crutches as he dealt with lingering issues from major surgery last summer, Paul's attitude never wavered as he enthusiastically embraced and successfully handled a myriad of new challenges thrust upon him in this role.

Research and Development Committee Update

LDDI's Research and Development Committee was established nearly seven years ago with its primary objective defined as overseeing efforts to conduct and administer independent research aimed at providing scientifically-based evidence concerning the practicality and suitability of existing and emerging techniques, technologies, and policies to address engineering issues related to land development design. The committee is further charged with identifying research goals, seeking funding, and providing overall, strategic direction to the broader research team, as well as promoting the pursuit of research within the industry and encouraging the use of LDDI as the vehicle of investigation.

To date, LDDI's research activities have largely focused on urban stormwater issues. With Virginia adopting new stormwater management regulations just five years ago – regulations that greatly impacted and continue to impact the land development industry - this research focus remains both timely and demonstrative of LDDI's commitment to remaining at the forefront of issues that most directly impact the land development industry. In recent years, LDDI, through the Via Department of Civil & Environmental Engineering, has participated in funded research contracts with the Town of Blacksburg, the City of Roanoke, and Fairfax County. Work with these municipalities involved developing innovative technologies and strategies to assist them in better managing their assets, complying with Municipal Separate Storm Sewer System (MS4) and other legislative requirements, and developing watershed master plans.

In April, Clark Nexsen's Allyson Monsour joined Clay Hodges (Virginia Tech) as Co-chair of the LDDI Research and Development Committee. Allyson replaces James Patteson as Co-chair of this committee, as James steps down coinciding with his retirement from Fairfax County. We welcome Allyson in this role, and offer a hearty thanks to James for his service leading LDDI's Research and Development Committee over the past six plus years!

Outreach Committee Update

The major objectives of LDDI's Outreach Committee are: 1) to promote the field of land development engineering to students and encourage their participation and support; and 2) to promote the Land Development Design Initiative to land development professionals and encourage their participation and support of the program. The committee has remained active this year serving as the primary logistics coordinator for the long-standing summer and winter general meetings, as well as the new spring general meeting in Charlotte. The Outreach Committee also takes the lead role on LDDI's annual spring sponsorship drive. LDDI's Outreach Committee is co-chaired by Bohler Engineer's Charlie Yowell and Brett Buckland.

How to Get Involved with LDDI

To continue the success and sustainability of the Land Development Design Initiative, both time and financial resources are needed from the industry. You and your organization can get involved by becoming corporate sponsor, municipal member, individual donor, or donating your time by serving on a committee or helping with course offerings.

Corporate Sponsorship, Municipal Membership, and Individual Giving

Over the past year, LDDI enjoyed the support of 50 corporate sponsors and municipal members, and nearly 100 individual donors. There are four levels of annual corporate sponsorship which afford varying levels of student access and interaction. Two levels of membership are offered for municipalities and other government agencies. For more information, please contact Kevin Young or Randy Dymond and view our website at <http://www.lddi.cee.vt.edu>.

Since its earliest beginnings, LDDI has depended heavily on the volunteer efforts of industry professionals to achieve program goals. The past thirteen years have seen LDDI grow to become a nationally-recognized leader in undergraduate land development design education. Despite the program's growth, LDDI continues to embrace an organic, grass roots operational model. This model relies on the participation of industry professionals who sincerely believe in LDDI's mission. There are nearly 800 individuals currently in the LDDI database, with many attending semi-annual meetings, both on-campus and at locations across the state. During these meetings, these professionals contribute ideas for practitioner involvement, courses, and other aspects for improving the program. If you're not already on our mailing list, please reach out to us to be added!

For more information on how to get involved with LDDI, please contact:

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