STUDENT-DRIVEN CHANGE:
ANALAYSIS OF LIVEMOVE BYDESIGN'S EXPERIENTIAL LEARNING PROJECT AND COMMUNITY IMPACT

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TERMINAL PROJECT

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ABSTRACT

Downtown Eugene is witnessing an economic resurgence through recent redevelopments. The Capstone Development at 13th Avenue and Olive Street will bolster this progress when 1,200 students move in fall 2013. These students and thousands more, will use the 13th Avenue corridor to access the UO campus largely by bus, bike and foot. 13th Avenue is already the most popular active transportation route to campus and has the highest number of daily bicyclists in the region, yet the return journey from campus to downtown can't be made along the same route. The land uses adjacent to 13th Avenue are transforming to support an improving downtown and a growing campus, but the roadway has not yet adapted to these changes, causing concerns about safety and undermining the City of Eugene and the University of Oregon's policies to support sustainable transportation and urban revitalization.

University of Oregon students, as part of an interdisciplinary organization called *LiveMove ByDesign*, have spent the 2012-2013 academic year conducting a study for the 13th Avenue corridor. Through extensive observation of transportation behavior, parking utilization, and of case studies across the globe, the group developed an alternative roadway re-design that improves safety and access for all modes of transportation.

The ByDesign project was student-driven, and provided a cross-disciplinary, real-world, applied, experiential learning project. Through personal participation and interviews of ByDesign group members and professional stakeholders, this research explores the lessons learned from the student-driven experiential learning model and how it could be improved and replicated for future LiveMove projects, other university student groups, or civic groups trying to improve their communities from the bottom-up.

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I: Introduction

America is currently witnessing historic shifts in transportation behaviors and housing demands.[1] [2] Very few cities, however, have proven to possess the capacity, skills, and political leadership to adapt its infrastructure and policies to address these changes.

Americans' per capita annual vehicle miles traveled (VMT) peaked in 2005 and they're now driving similar annual distances not seen since 1995.[3] Decreased VMTs are coinciding with increasing travel by public transportation, bicycling and walking.[4] [5]

The City of Eugene has a history of thinking and acting progressively around multi-modal transportation issues. The city has miles of off-street walking and biking paths and on-street bike lanes on many of its streets. These developments have encouraged Eugene residents to use multiple modes for their transportation needs; Eugene has a robust transit system and one of the highest bicycle commute to work mode shares in the country.

Downtown Eugene is witnessing an economic resurgence through recent redevelopments. The Capstone Development at 13th Avenue and Olive Streets, a mere .75 miles from the entrance to the University of Oregon (UO) campus, will bolster this progress when 1,200 students move in fall 2013. These students and thousands more, will use the 13th Avenue corridor to access the UO campus largely by bus, bike and foot. 13th Avenue is already the most popular active transportation route to campus and has the highest number of daily bicyclists in the region. Yet a safety and access issues exists because the return journey from campus to downtown cannot be made due to the street only allowing for one direction travel. As a result, hundreds of bicyclists use this roadway illegally by riding on the sidewalk or within the roadway to travel west towards downtown. To date the City of Eugene and the UO campus have either not known about this issue or chosen to act as if this problem doesn't exist.

Student-driven projects can fill this void, by adding capacity at a relatively cheap cost, and provide these public entities with cutting edge knowledge of practices occurring throughout the world. An interdisciplinary organization called *LiveMove ByDesign* did just that. The purpose of this research is to assess the lessons learned and potential impacts from the student-driven experiential learning model, and how it could be

improved and replicated for future LiveMove projects, other university student groups, or civic groups trying to improve their communities from the bottom-up.

Background

Travel behaviors and demands are changing

Americans' travel behaviors have changed and the national policy and state and local planning should take note. Americans are driving less.

For six decades, U.S. transportation policy placed a premium on automobile mobility above all other modes, and the populations' habits followed suit. Between 1946 and 2004, the average increase of total vehicle miles traveled (VMT) increased by 3.8% annually, and per-capita annual average VMT increased by an average of 2.5% annually.[6]

Beginning in 2005, Americans' driving travel habits started to decline. Since 2005, per-capita VMT has decreased annually, and in 2007, the total annual VMT driven by all Americans started to decline as well.[7] By 2011, the average American was driving 6% fewer miles per year than in 2004, and, when adjusted based on the driving age population (16 and older), current VMT is almost as low as 1995 VMT levels.[8] [9]

The decrease in miles driven coincides with increasing public transit and bicycle use rates that are reaching record levels. In 2012, Americans took 10.5 billion public transit trips, which is the second highest annual ridership since 1957. The increase in public transit occurred in every mode (i.e. subway, light rail, bus).[10] Total trips made by bicycle in the U.S. more than tripled between 1977 and 2009, while the percent of all trips made by bicycle nearly doubled during this period, from 0.6% to 1%.[11] The increasing use of bicycles as a mode of transportation coincides with the dramatic increase in bicycle infrastructure in many cities throughout the country.

America's changing travel habits are, in part, being led by demographic demand shifts. The Millennial Generation (people born between the early 1980s and 2000) are moving into stages in their lives which have historically coincided with peak driving, home ownership and family development. The Millennial generation, however, is demanding different transportation infrastructure and more livable, walkable communities. Millennials are leading the travel habit changes.

From 2001 to 2009, Millennials (Americans aged 16-34) decreased their per capita VMT from 10,300 to 7,900 miles annually, representing a 23% decline. This same

group took 40% more annual miles traveled by public transit, 24% more bicycle trips and 16% more walking trips in 2009 than in 2001. [12]

The Millennial Generation's shifting travel habits coincide with their desire to live in urban environments. Millennials are twice as likely as their parents' generation to want to live in a city, with more than 75% stating they plan to live in an urban core in their lifetime. Currently, 86% of Millennials who rent rather than own are moving to walkable, urban areas.[13] As this generation repopulates urban centers, they are 2.5 times more likely to not own a car than those living in rural areas.[14] Federal transportation policy has failed to adequately acknowledge these shifting demands for more livable environments that provide more transportation options; at the same time, few local and state governments have taken the lead.

Experiential learning as a tool to address shifting public needs

America's shifting travel behaviors and housing demands are occurring at a time when municipalities across the U.S. are least capable of planning for and funding the public's changing preferences. Cities are suffering from deteriorating fiscal conditions due to a struggling housing market, sluggish consumer spending, and higher than normal unemployment levels. [15] In this climate of recession, cities are challenged to overcome outdated problem framing and transportation models, and are hard pressed to get reactionary and risk-averse public employees to respond to Americans' shifting behaviors and demands.

Based on this shortfall, many cities have begun to look to institutions of higher education, more specifically experiential learning programs, to help fill their capacity gaps. Experiential learning programs simultaneously combine the energy and diverse skill sets of university students, while connecting them to real-world project that address vexing community issues. These forms of partnerships offer cities a cost effective way to fill capacity gaps and receive innovative ideas, designs, and recommendations that are up-to-date with the latest training. The students provide a space for politically sensitive issues to be addressed in a safe way for public decision makers. These experiential learning partnerships provide students opportunities to broaden their skills and gain multi-disciplinary understanding of real-world projects that enhance their future careers.

By its very nature, the social engagement offered through experiential learning provides a deeper understanding of the relevant issues, delivering the opportunity to develop collaborative and transferable skills. Experiential learning produces more reflective professionals and provides structured opportunities overseen by faculty and professionals purposefully designed to promote student learning and development.[16].[17] [18] At the same time, it addresses the exact issues that cities do not have the capacity to tackle to a necessary extent.

Applied, experiential learning projects are quite common in advanced degree programs at colleges and universities across the country. The University of Oregon is no exception, and it has two model programs replicated around the country. The Sustainable Cities Initiative (SCI) is an innovative experiential learning incubator that brings together multiple disciplines across the university to work on city-identified projects and problems. The Community Service Center (CSC) is an experiential learning innovator with 40's years of experience focused on planning, public policy, and economic development research for Oregon's communities.

Experiential learning is best achieved when social engagement is part of the educational experience. Existing class projects, such as those engaged with SCI and CSC, however, occur largely within the confines of the classroom and are overseen and directed by university faculty. Due to timing and necessity, the faculty members engage in project development, scoping and problem statement development with the community partners. It is not until the students enter the classroom that they are handed the project details and asked to innovate within the predetermined vacuum. These early project details are important to ensure success, but students are largely unable to engage and benefit from being part of this early planning process.

Student-driven experiential learning is unique and underutilized

Traditional models of experiential learning provide professional experience to students and create space for innovative ideas and politically controversial thoughts to be introduced into the public domain. The final product, however, is developed and delivered within the confines of the classroom and must fit a set scope and problem statement determined by city staff who are the same individuals who may lack the political capital, training, time or skill to put innovative policies into practice. Developing

projects in this manner is top down and may not provide an opportunity for the public to define and prioritize their most pressing problems.

Enter student-driven experiential projects. Students detached from the classroom, but with the skills and professional networks afforded through a trusted student group, may be the best conduits to channel human needs and preferred community outcomes. Student-driven experiential learning projects are able to conduct "do-it yourself" human and community projects that allow students to experience the whole project process— from problem definition to final deliverable— and allows them to put their best knowledge, skills, and practice into action.

Communities are looking for new ways to engage with new thinking in politically safe ways that can result in improved practice and community benefit. Student-driven experiential learning projects offer communities a new and innovative way to access this preferred outcome. There is an extensive body of literature on experiential learning that happens within the classroom, but no research to date has analyzed entirely student-driven experiential learning that allows students to manage, learn from peer-to-peer education, and deliver a professional project that advances the public discussion and vision for what is possible within communities. It is the intent of this research to address this gap and advance this form of learning.

Research Purpose of the research is to document and advance student-driven experiential learning at the University of Oregon

LiveMove – a UO student group that brings together undergraduate and graduate students from a variety of backgrounds and disciplines to focus on transportation and livability issues – established "LiveMove ByDesign" in 2011 to provide students with a hands on, real-world, experiential learning project.

The purpose of this research is to document the LiveMove ByDesign planning and design process and determine how innovative, student-driven projects impact participants and their communities. ByDesign's research project results include: (1) a completed roadway plan and redesign for 13th Avenue in Eugene, Oregon; (2) the development of a student-driven, cross-disciplinary, real-world experiential learning opportunity that could be replicated by LiveMove, other student groups at other universities; and civic groups trying to improve their communities; and (3) a case study

describing the methods used to integrate experiential learning into student-driven transportation planning and design processes as well as lessons learned.

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II: The LiveMove ByDesign Project

LiveMove Background

LiveMove is a UO student group that brings together undergraduate and graduate students from a variety of backgrounds and disciplines to focus on transportation and livability issues on campus, in the community, and throughout the State of Oregon. . The group's mission is "[t]o promote healthy, sustainable communities by integrating transportation and livability through collaboration, education, research and outreach." The group began four five ago, and has grown in membership each year. LiveMove is currently comprised of nearly 40 undergraduate and graduate members, representing the Departments of Planning Public Policy and Management (PPPM), Architecture, Environmental Studies, Communications, the College of Business, and the School of Law.

LiveMove receives a grant of more than $25,000 per year from the Oregon Transportation Research and Education Consortium (OTREC), which sponsors research, education and technology transfer projects at its partner universities (University of Oregon, Portland State University, Oregon Institute of Technology, and University of Utah). OTREC is primarily funded by a University Transportation Center grant from the U.S. Department of Transportation.

LiveMove's grant from OTREC requires a 1:1 match made up by volunteer hours or other funds. Every hour that a LiveMove member volunteers, whether attending a weekly meeting, a speaker series session, or engaging in the group's projects, they receive in return a credit of greater than $15 to use towards travel and fees to attend regional and national transportation or livability themed conferences. In return, LiveMove is able to use the volunteered hours towards the grant's match requirement.

LiveMove expends OTREC's monies in two ways: conference funding and a monthly speaker series. Students use volunteer credits to travel to conferences such as the annual Transportation Research Board Conference, the League for American Bicyclists Summit, American Planning Association (APA) Conference and the Oregon Chapter of the APA Conference. At these conferences members meet professionals and learn cutting edge practices. Upon return LiveMove hosts discussions so that all its members can learn from and take full advantage of these opportunities.

LiveMove also hosts a monthly speaker series, which attracts regional and national leaders on sustainable transportation and livability issues. Past speakers include the President of League of American Bicyclists, Andy Clarke; City of Chicago Department of Transportation Commissioner, Gabe Klein; and U.S. Congressman Peter DeFazio. Through the speaker series, LiveMove has developed partnerships with UO Administration, Associated Students of the University of Oregon (ASUO), SCI, PPPM, the UO Outdoor/Bike Program, the Cities of Eugene and Springfield, Lane Transit District (LTD), and the Lane Council of Regional Governments (LCOG). The trust and understanding of LiveMove's work has evolved and deepened as the group continues to improve its work within the community, and in return engaging broader community discussions about transportation and livability.

What is ByDesign – the initial spark

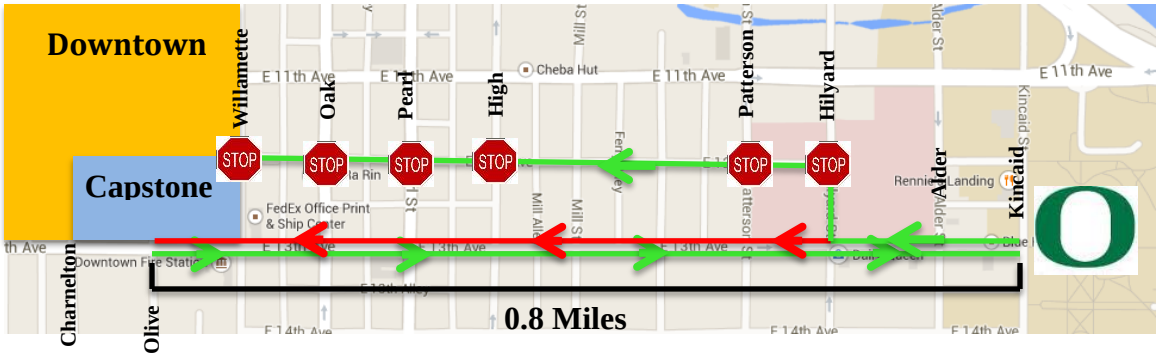
LiveMove established "LiveMove ByDesign" in order to provide students with a hands on, real-world, experiential learning project. ByDesign was developed to achieve two goals: 1) expand LiveMove's experiential learning opportunities for its members, and 2) provide an opportunity for students to work on real-world projects aimed at improving safety, access, and livability in the Eugene-Springfield area. ByDesign is a subgroup of LiveMove, and its members possess broad skills and knowledge ranging from engineering, design, planning, project management, leadership, and strong writing and interpersonal skills. Using these skills, the subgroup has built off of their classroom experiences and applied innovative transportation concepts to a perceived problem in the City of Eugene.

The first ByDesign project is the "Downtown-Campus Corridor Street Redesign," and it took place during Winter Term 2012 through Spring Term 2013.
Students developed the project after LiveMove members identified problems with roadway safety conditions and access for cyclists and pedestrians on 13th Avenue, which connects the campus with downtown Eugene one mile away. This roadway is the most popular active transportation route to campus and has the highest number of daily bicyclists in the region, yet the return journey from campus to downtown can't be made along the same route. The land uses adjacent to 13th Avenue are transforming to support

an improving downtown and a growing campus, but the group feels the roadway has not yet adapted to these changes, causing concerns about safety.

In an effort to educate students and community members LiveMove ByDesign applied the group's unique and diverse skills to develop a bottom-up plan of street redesign for the 13th Avenue Downtown-Campus corridor. The corridor project area is nearly three-quarters of a mile long, stretching along 13th Avenue from Olive Street to the UO campus at Kincaid Street.

Image 1: Map of Downtown-Campus corridor



A key element that sparked student interest in redesigning 13th Avenue is a direct result of the soon to be completed multi-family student housing unit, located between Charnelton and Willamette along 13th Avenue. The project is estimated to cost $89 million dollars, and includes nearly 1,200 students in a 375-unit student apartment complex. [19] [20] The developer, Capstone Collegiate Communities ("Capstone"), proposed providing nearly one car parking space for each bed space, a number that requires the construction of two structured parking garages with more than 1,000 parking spaces. In response to the parking proposal, LiveMove led an effort, along with others in the community, to dissuade the developer from building at that ratio, an effort that was unsuccessful. Nonetheless, students realized the importance of a strong and robust connection between the 13th and Olive Apartments and the University of Oregon.

The Capstone property is located one block away from LTD's Eugene Station, which has numerous bus lines running to the UO campus and others to the Lane Community College (LCC) main campus. The property is two blocks from LCC's new Downtown Campus, and less than three quarters of a mile from the west entrance of the

UO campus. Furthermore, the development is within the downtown core, which exempts new developments from parking requirements. [21]

LiveMove initially raised parking concerns to Capstone, the Eugene City Council, and the Eugene Transportation Planning Office. The students urged that parking was unwarranted because of student travel patterns that deemphasized the use of the car and because the parking requirement would significantly increase rental costs. According to the UO 2013 Commuter Survey, 16% of students living off campus drive alone to class, while 84% get to campus by other transportation modes, including walking, bicycling, bus, or carpooling. Additionally, only 56% of UO students own a car. [22] These facts, in addition to the development's proximity to Eugene Station, the new LCC Downtown Campus, and to the UO campus, led to LiveMove's belief that students living in the new development would be far less likely than the overall student population to drive or own a car.

Furthermore, the cost of a parking space substantially increases rent, which may make the Capstone development cost prohibitive for many students. Capstone's proposed two structured parking garages are estimated to cost nearly $12 million, which is roughly $12,000 per parking space (not including costs for ongoing operations and maintenance).[23] Parking represents a set cost that will be levied against all tenants, whether they have a car or not.

Regardless of parking, at the heart of the issue is the unsafe and inefficient connection to campus from Capstone for transportation modes other than cars. LiveMove and other regional advocates argue that the Downtown-Campus corridor is currently not safe for bicyclists, and the problem is only going to get worse with a denser corridor. Eugene's Transportation Planning Office shares LiveMove's concern. Together, LiveMove and the Planning office examined ways to further research and plan for a safe, accessible, and multi-modal roadway. The student-driven team translated its diverse skills and brainstorming into realistic actions with the ByDesign Downtown-Campus Corridor Redesign and Plan.

Planning the first ByDesign project

UO Associate Professor Marc Schlossberg taught Bicycle Planning (PPPM 438/538) during Winter Term in 2012, which included former LiveMove President

Cortney Mild. This class was part of the Sustainable Cities Year Program (SCYP), which matches courses across multiple departments to a single Oregon municipality to work on sustainability projects at a variety of scales.[24] Mild was assigned to a group that focused on developing a plan and design for a new bike path in Springfield, Oregon. Mild found the project both pertinent to LiveMove's work to expand educational opportunities for its members, and important to advancing sustainable active transportation and livability throughout the region.

Mild presented the Bicycle Planning course's project to LiveMove to see if the group wanted to attempt to replicate the project—not as part of a class but as a student-driven initiative led by LiveMove members. LiveMove members felt there was limited opportunity throughout the UO campus for planning students to learn design skills and architects to learn planning skills, let alone work together on projects. LiveMove decided to develop a project that would build off of members' diverse skill set, expand education and knowledge, and allow the group to collaborate in a real-world team setting.

LiveMove had many novice designers at that time. In preparation for selecting a project, Mild worked with Masters of Architecture student Kate Bidwell (MArch '12) to design and teach short courses for Adobe Photoshop, InDesign, Illustrator, SketchUp, and AutoCAD. With these short courses, LiveMove students felt prepared to move forward with a project by selecting a corridor that was unsafe or needed improvement.

ByDesign Team

During the first year, the ByDesign team consisted of a subgroup within LiveMove. The team received funding from LiveMove to pay for printing and food for charrettes and presentations. During this first year, the ByDesign team relied on many LiveMove members for different tasks, but the team consisted of a core group of 12 individuals who were engaged in the project's development, data collection, planning, design, and presentation development. (See Chapter III for list).

ByDesign Management

Mild graduated with a Masters of Community and Regional Planning (MCRP) degree in spring 2012. I was elected president of LiveMove for the 2012-2013 academic year. I worked closely with Dave Amos, dual MCRP/Masters of Architecture, to build from Mild's efforts.

LiveMove, as a group, functions in a democratic manner, where overwhelming consensus dictates the direction and decisions for many of its functions. This held true for the ByDesign project, as the group collaborated to build the scope, problem statement, project timeline, schedule and tasks. The project still required individuals to act as project managers to ensure the team was progressing, reaching deadlines, making decisions to advance its work, and communicating with project stakeholders, including the UO Campus Planning and Real Estate, UO Government Relations, UO Parking and Transportation, UO Bike Program, City of Eugene staff, and the University-area business association.

Amos led the design management for the project, and I led the planning and document preparation. Together, we collaborated on creating a timeline, scheduling lab spaces, meeting with project stakeholders, and keeping the ByDesign volunteer team engaged and motivated.

ByDesign's process

Building from the group's design short courses, the ByDesign team sought to focus on the Downtown-Campus corridor (13th Avenue) as its first ByDesign project. In the summer of 2012, the group highlighted its planning, policy, and architecture skill sets to ask for and receive buy-in from the Eugene Transportation Planning Office to develop a plan and street redesign for this vital corridor.

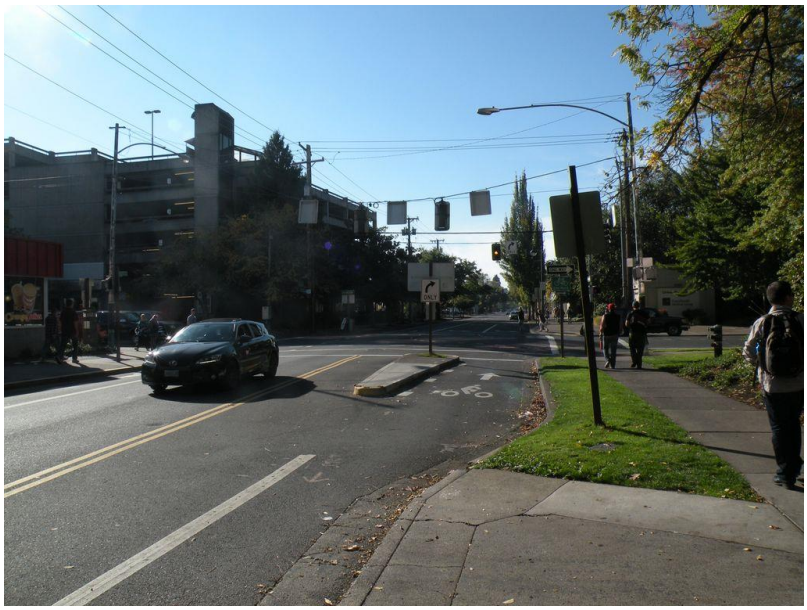
In October, ByDesign presented its project problem statement and scope to the Transportation Office and City Traffic Engineer, Tom Larsen, for feedback. ByDesign revised the problem statement three times. Concurrently, it conducted a student lead site visit to the corridor, which included documentation of sidewalk and roadway conditions, on-street parking spaces, bicycle infrastructure, public transportation availability, and adjacent land uses for 13th and 12th Avenues from Olive to Kincaid Streets. The team used this information to document current parking rates, building footprints, public transportation stop locations, land use attractors and detractors, curb cuts, and tree coverage.

Two ByDesign members, Hagen Hammonds and Amos, used a self-guided project assigned in Planning Analysis II (a GIS focused course) to conduct additional spatial research analysis for the corridor. These members analyzed the quality of the

corridor's bicycle parking, and historical income levels, housing types and density, and ages of the corridor's residents.

During the normal work weeks (Monday-Friday) of November 12-16 and 26-30 ByDesign conducted hour-long morning (8-9 AM) and evening (4:30-5:30 PM) peak traffic and bicycle counts at the signalized intersections of 13th Avenue and Olive, Willamette, Oak, Pearl, High, Patterson, and Hilyard Streets. The team used this information to develop estimated automobile and bicycle daily traffic counts. The data also provided a better understanding of cyclists' preferred travel patterns, and to what extent the cyclists used the sidewalk or went illegally in the opposite direction of traffic west from campus along 13th Avenue.

Image 2: Hilyard and 13th intersection where westbound bike lane terminates



In the Winter Term, the ByDesign team further developed designs for current conditions and analyzed its automobile and bicycle-count information. The group worked with LCOG to understand and use its Regional Bike Count data for the Downtown-Campus corridor project. Through this collaboration, LCOG maintained a conservative estimate for the number of cyclists entering the UO campus at Kincaid and 13th Avenue was nearly 3,500 riders per day. ByDesign also researched and analyzed several city and regional plans, state transportation plans, and transportation organization best practices and guidance documents for bicycle and urban street redesigns. The group developed a policy memorandum that found ByDesign's plans for the corridor are in compliance with

all city, regional, and state plans, as well as with national organizations' recommendations.

In February, the team planned its first public participation and engagement meeting for this project through a design charrette. ByDesign collaborated to develop an agenda, presentation, and speaking and facilitator roles, and invited its project stakeholders. The charrette occurred on Tuesday, February 26 from 2:30 - 4:30 in the Susan Campbell Graduate Student Center on the UO campus.

The charrette consisted of a presentation of ByDesign's work and the corridor's current conditions. Charrette participants broke up into teams of professionals and students to ask questions about the project, identify problem areas in the corridor, and develop designs for different intersections and roadways. Some teams were more successful at making designs, while others spent their time asking questions of the project scope and how best to fix the current issues without needing to redesign the entire corridor. The ByDesign team documented comments and questions, and collected design recommendations from the charrette participants. Building from the charrette, ByDesign conducted further corridor inventory of roadway signs, and incorporated many of the design recommendations into its formal plan and designs.

At the outset of the 2013 Spring Term, ByDesign developed a schedule to complete its draft plan and designs for its efforts by the end of May. To ensure its members put adequate time and effort into the project, Schlossberg agreed to provide ByDesign team members a two-credit independent study course. During this term, team completed three case studies: 1) bicycle business economic case study, 2) bicycle traffic signal case study, and a 3) comparative case study of 2-way cycle track redesigns in other U.S. cities.

The final product

The ByDesign team planned to publicly present its plan and redesign by hosting an open house for LiveMove members, project stakeholders, elected officials and campus administration, and the broader public. The goal for the open house was to allow participants to review the team's work, provide feedback and critique, and further the discussion of why it is necessary to improve safety and access of the Downtown-Campus corridor. ByDesign hosted the open house on the evening of May 28th, and included

invitations to the UO President, Vice President for Student Affairs, Associate Vice President of Administration, Director of Community Relations, deans, faculty, campus staff, and student government leaders. Additionally, the team invited the City of Eugene Mayor, City Council, City Administrator, Transportation Planning Team and Traffic Engineers, and area advocates. More than 50 people attended the public open house on May 28, 2013. The attendees included area advocates, transportation professionals, campus administrators, and corridor business owners, and students.

The final plan and designs can be accessed at www.livemove.org/. The discussion proved insightful and the recommendations were both educational for the students and the broader public and community leaders.

Next steps for the project

This academic school year ends on June 14th and many LiveMove members will graduate; however, the group has a proven track record with area professionals and the broader community. ByDesign has proven successful at achieving its two goals. The students engaged the broader community and in the process gained hands on, real-world experiential learning lessons that could not be replicated in any classroom. The ultimate outcome for the team's roadway design is still to be determined, but the student-driven project has raised the stakes and expectations of community members for what they wish to see from their local government. There is much work that needs to be completed in order for the ByDesign team's vision to be witnessed, but the efforts of the team has presented a safety concern that the city and campus cannot shy away from.

The next steps for this project are uncertain. I am graduating in June, as is Dave Amos. The team has received word from those returning to LiveMove next year that they will advocate and make plans to progress the Downtown-Campus corridor plan and redesign. The area advocates and the Eugene Bicycle and Pedestrian Advisory Committee (BPAC) and the Eugene Sustainability Commission have taken strong interest in pursuing further consideration of this project. Through a broad based advocacy effort, which includes students, citizens, campus administration and staff, the LiveMove ByDesign team knows that their efforts will not go wasted and the City of Eugene will likely be persuaded to improve safety and access along 13th Avenue in the not too distant

future. Should this not happen, the ByDesign team still leaves with new, real-world educational experiences that can be directly incorporated into their future careers.

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[22] University of Oregon Campus Planning and Real Estate, "University of Oregon Commuter Survery 2013 Summary of Statistics," http://uplan.uoregon.edu/recognition/UOCommuterSurvey2013_SummaryofStatisticsSpreadsheet.pdf (May 4, 2013).
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III: Methodology

This research was conducted to document LiveMove ByDesign's planning and design process, and was structured to evaluate the outcomes for the ByDesign team and project stakeholders. ByDesign engaged more than 20 LiveMove members throughout the 2012-2013 academic year, but there were 12 core members of the project team. There were an additional 11 project stakeholders throughout the community.

The research data was collected through two focus groups with the core project team, semi-structured in-person interviews with six project stakeholders, and personal project participation and reflection. The researcher recorded the focus groups and interviews using a smart phone voice recording application. The focus groups lasted approximately one hour, and the interviews lasted approximately 30 minutes. Two focus groups were held to accommodate the students' schedules. The interviewees were selected because they are representative of the project stakeholders who most closely worked with the ByDesign team. Interview participants included UO faculty and staff and City of Eugene staff members. The following tables outline the characteristics of the core ByDesign team and the project stakeholder interviewees and how they participated.

TABLE 1. Outline of LiveMove ByDesign core project team

Participant	**Year and Degree**	**Receiving Course Credit**
Dave Amos	2nd year dual MCRP & MArch	Yes
Molly Bacon	Senior, PPPM	Yes
Allison Camp	2nd year MCRP	No
Michael Duncan	2nd year MCRP	Yes
Ian Foster	2nd year MCRP	Yes
Paul Leitman	2nd year MCRP	No
Jason Lugo	2nd year MCRP	No
Nick Meltzer	1st year MCRP	No
Emma Newman	Senior Environmental Studies Program	No
Geoff Ostrove	MCRP graduate and 1st year Communications PhD	Yes
Alex Page	1st year MCRP	No
Jon Reha	Senior PPPM	No

TABLE 2. Outline of project stakeholder interviewees

Participant	Title	Project Engagement
Gwen Bolden	UO Director of Parking and Transportation	Design charrette
Reed Dunbar	City of Eugene Associate Transportation Planner	Project statement, scope and design charrette
Emily Eng	UO Planning Associate for Campus Planning and Real Estate	Design charrette
Tom Larsen	City of Eugene Traffic Engineer	Project statement, scope
Briana Orr	UO Bike Program Coordinator	Traffic and bike counts, design charrette
Marc Schlossberg	UO PPPM Associate Professor, Associate Director of OTREC, Co-director of Sustainable Cities Initiative, LiveMove faculty adviser	Periodic project update, and spring term independent study advisor

Focus groups and Interviews

Two focus groups were organized and conducted with ByDesign's core project team. One focus group was held in Eugene and another in Chicago while many project team members attended the annual American Planning Association's National Conference from April 13-17. Participants were questioned about their overall level of participation with the project, their motivation and experience working with the team of students and stakeholders, and the lessons learned from the process. Examples of questions to the students included asking their opinions about the strengths and weaknesses of the student-driven model compared to the classroom based experiential model, how would they improve the project's process, what lessons they learned, and what their major recommendations for improving the student-driven project would be. Stakeholders were asked for the strengths and weaknesses of the student-driven model, how well or if students filled capacity gaps, how the group could improve public engagement and project outcomes in the future, and what their major recommendations would be for improving the student managed project model.

The focus groups and the interviews were semi-structured, and follow-up questions were used to clarify responses and encourage participants to elaborate on their responses. Audio recordings of the focus groups and the interviews were transcribed and

information from these data sources was grouped thematically to identify similarities and differences between the participants by affiliation.

Follow up questions were asked of the ByDesign core project team to further clarify and ensure accuracy of the project's background and context for the study. Additionally, an interview was conducted with Cortney Mild, initial ByDesign project manager and former LiveMove President, to ensure accuracy of project history and development. This interview provided additional insight into her intentions and desires to create a ByDesign project for LiveMove.

Participant observation

The final source for data collection was conducted through the entire length of the ByDesign project. I was involved in early discussions about creating a ByDesign project, participated in the design short courses in 2012, was a liaison with UO campus and City of Eugene project stakeholders and acted as a project manager during the 2012-2013 academic year. This close connection with the project development and progress allowed me to observe the experiential learning first hand, and provided direct observation of student and project stakeholder engagement and interactions.

As a participant of classroom based experiential learning projects at the UO through CPW and SCI courses, I undertook regular reflection on how the ByDesign project was similar and different. Additionally, as a student project manager, I understood the challenges the project team felt in fully engaging as volunteers on this project while ensuring adequate time was available for other priorities. This close connection to the ByDesign project, and understanding of other experiential learning courses provided a basis to further understand and analyze the student-driven experiential learning and project model.

IV: Findings

The key lessons learned that emerged from the focus groups, interviews, and participant observation can be grouped into three categories: student development, project process, and stakeholder buy-in.

Student Development

ByDesign members joined the team with varying degrees of experience with experiential learning projects or course work. While many ByDesign members had previously taken experiential classes at the UO, either through SCI or CSC, and therefore had a sense for the time commitment and potential challenges this project would present, others had no formal experience.

Experiential Learning

ByDesign members found that the student-driven experiential learning model was successful, and they also believed that it provided lessons not available within the classroom. The lessons the students highlighted includes: project management skill development; the ability to work in a real-world team environment with cross-discipline and diverse backgrounds; collaboration; an understanding of how to conduct a corridor study; an ability to research innovative best practices; a new understanding of plan and design education; experience participating in and facilitating charrettes and open houses; public speaking; presentation development; public relations and community outreach; public event logistic planning; stakeholder communication and engagement; and "trial by fire."

The latter lesson, "trial by fire", was a learning lesson members strongly felt was important to their educational development. While there was uncertainty and likely wasted time and resources throughout the project's process, the student-driven working environment provided stronger learning opportunities. Students understood that their "mistakes" or inefficient steps proved valuable in the experiential learning process. "We saw a problem and wanted to go in and attack it. When this happens there is so much learning available. We probably didn't complete this project the right way or even the best way, but we learned so much from the process. Looking at the bigger picture, so much learning happens when you just have to figure it out yourself. So as a student

organization you don't have to go by the books and you can try multiple different processes before you fall on the right approach," said one member.

Team Assets & Commitment

The group believed that they possessed enough, energy, skills, built up capital with the community, and adequate time and resources to develop a professional project by the end of the academic year. The members felt confident based on their prior peer-to-peer collaboration and by witnessing others' professional work. One member said, "[w]e have the energy and we have the passion to get this conversation started. We have the cohort of students that are connected to the community and within the years we are here we feel strongly that we have the capacity to facilitate and influence the future outcome of the city." They were also confident in LiveMove's solid presence, both on campus and in the community from its speaker series events, advocacy work, and individual member's internships with the project stakeholder entities. On member stated, "I was confident in the team's skill set and how knowledgeable the group was on the specific topic. I felt comfortable working with this team knowing we could develop professional grade work, even without the direct assistance of a professor."

This theme was echoed by the project stakeholders. One said, "I saw that this group of motivated, concerned students looking to both improve themselves and their surrounding environment, and I feel this was a big positive for this student-driven project." Another stakeholder said, "[t]he group is made up of passionate people who really care about the subject matter, and there is a lot of energy around this project."

Members also acknowledged that they specifically engaged in ByDesign because of the cross-discipline educational opportunities available unlike anywhere else on campus. "I admire this project because how interdisciplinary the group is. This doesn't often happen across campus or with other student groups or organizations. This project is one of those places where this occurs in a successful and productive way, and I've learned a lot from working with project members," said one member.

The ByDesign members' skills were strong in planning and design; however, they felt the team lacked traffic engineering skills. The project team had one professional engineer who is enrolled in the Masters of Community and Regional Planning program, Nicholas Meltzer, P.E., who aided in the engineering analysis and recommended designs.

Meltzer's concentration is not traffic engineering, however, so his knowledge was limited to basic civil engineering principles. As a result, LiveMove did not conduct signal timing or traffic simulation modeling (i.e. changes in traffic volume and level of service at individual intersections). "One restraint was our lack of engineering skills. It would have been nice to look at the traffic signal timing or altering the roadway's traffic from one direction to two, but it wasn't feasible within our group's abilities," said one member.

Benefit of Being a Student

A common theme from both the ByDesign members and stakeholder interviews was the power of students to introduce new and innovative ideas into the public realm. While speaking about 13th Avenue, one member said, "the city may not want to address the problem out of fear of the business backlash, the business owners may only understand the status-quo, and other student groups may not have the time or skills to envision anything different. That is why our group is unique in that that I think we can raise the safety concern and introduce our innovative design and plan in a safe environment for the decision makers and elected officials, and hopefully witness success on making change happen."

While students are in school, they can access high level officials for advice and mentoring that is not as easily available once their degree is completed. A group member echoed this thought in saying "[r]ecognize that as students you have leverage to get into areas that are not accessible by the general public on projects such as these. Exploit this fact as much as you can to gain answers, information, and advice."

The project stakeholders agreed. "It's through innovation that we can get beyond the standards of today and achieve what we set out to do in our plans. It's got to come from the university, and the students who are learning this in the classroom and studying abroad and understanding what it means to have a safe, connected network for all modes can help us achieve this breakthrough," said one stakeholder. Another added that, "[s]tudents have a safe way of being able to introduce ideas and expand the universe of possibilities that might be talked about." Finally, another said, "I think a void exists because the staff is largely hesitant to put their neck out there, they are tired of the community battles, and there seems to be limited staff collaboration between city and campus. So in this void it's needed for someone to step into it. Students are excellent for

this task because you can stick your ideas out there and if they take hold there is political support created, and if not it's just students doing nice work."

Academic & Project Schedule

ByDesign members volunteered their time to participate in the project. Inevitably, members had to deprioritize the project due to other academic requirements and family needs. This was a common theme from the focus groups. "The biggest challenge to this project is that we are not required to do it, so we don't feel the need to invest our time like we would for a class or job," said one member. Another member added, "the weakness is that we all have a lot of things going on at this point in our lives making it challenging to give as much time to this project as we'd like. But, at the same time, the year-long structure of the ByDesign project eases the challenges presented by the quarter academic calendar since it spans the entire academic year."

Project Management

ByDesign members expressed the need for strong leadership for the project's management. "I think this project requires strong and committed leadership, because of the challenges we have with our scheduling priorities," said one member. This member went onto say "[t]he team needed to fully trust its leaders to represent us at stakeholder meetings and be effective communicators and listeners." Team leadership and management was undertaken primarily by Dave Amos and me. Amos and I were self-selected to lead this project with the approval of the group's members.

Project Development

A student-driven project such as ByDesign had never been attempted by its members or by its stakeholders. This made the development of the entire project challenging and educational for both parties.

Site Selection

Team members and stakeholders believed that the selection of the project site was important and should relate to the students' needs. "We are some of the stakeholders, so regardless of whether or not we are doing this for class credit or for LiveMove, we have an interest in 13th being better for us, the student population," said one member. Another member said, "[a] strength is that we all have a lot of energy on that street, because many of us use it every day and see potential in what currently doesn't exist economically." A

project stakeholder said, "[t]he people who are most likely to use the facility are involved in the analysis and development of the alternative. So I think they understand the challenges better than most. As they start to talk to more engineers, I'd imagine that you start to understand that there are limitations, and I think that's very valuable."

On the other hand, a few members and stakeholders believed that the students' close relationship to the project could provide predetermined—and perhaps biased—solutions. A student highlighted this fact, "[t]he public may believe we had a preconceived what we wanted for the alternative before we started our research, which may be true or not, but is problematic."

Problem Statement & Scope

At the beginning of the project, ByDesign members and project stakeholders were uncertain about the specific problem ByDesign was trying to solve. Student members primarily wanted to address their perceived problems regarding bicycle and pedestrian access along the 13th Avenue corridor. At the same time, some stakeholders believed this may have been too narrow a problem statement, and questioned whether students would be able to assess impacts to the whole roadway network. "I think we approached the process with a bias, and we looked at all the data and found the problem we were looking for at the outset. I think that we used an advocacy model, but because we are an outside group aiming to make things better in the world, more worried in the outcome, it's totally allowable," said one member.

Project stakeholders agreed that this was a potential problem, but they had varying responses to dealing with this issue. One said, "[s]o if we already know what you want to do, and we find out that your research and your efforts verify what you wanted to do when going in, I find it very hard to find any value added there. The creative energy isn't really there, because you are trying force feed a solution into a corridor without really looking at what the solution really is in the larger context."

Others believed there are ways to address this issue by being clear about the group's intent. "I think it's primarily how you communicate your intention. I think it's important to be forthright about the team's intentions and clearly state at the outset that this is your problem statement and this is our goal for this project. If you do this clearly, there is less confusion and greater understanding," said one stakeholder. Another

stakeholder added, "I think what's nice in the way that you've done your work, I mean yes you have an agenda, but you are backing it up with analysis, with visual designs to allow a broader community to comment and dream with you. There is too much process and not enough advocacy in planning today so someone needs to fill the void."

Project Tasks

In fall 2012, many members were engaged in the project for varying reasons, including an interest in accumulating volunteer credits to use for academic conferences, a self-interest in acquiring new design skills, and a genuine interest in making positive and lasting change in Eugene. Many members, however, felt that the project tasks were often ambiguous, which led to disinterest in the project by some and limited progress on the project as a whole. "In the beginning it was tough to understand how the data was going to be plugged into the report. There also seemed to be disconnect between committed members here today and those who engaged solely for development of design skills and not for the seeing out the project deliverables at the end of the year," said one member. Many members accredited this to it being ByDesign's first student-driven project.

Access to academic credit in the form of independent study seemed to catalyze the group and drive the project's progress in spring 2013. The development of the credit offering was efficient because of Associate Professor Marc Schlossberg's investment in LiveMove as the faculty adviser. "Progress was made during the first two terms this year, but I feel that offering credits for cooperation on this project changed everything and the group really gelled and it became a priority for all of us." Another member added, "Availability of the two credit independent study course motivated me to set aside more time, and I'm really happy that I did because I am learning a lot more this term than the previous two."

Public engagement

Public engagement in some form is necessary for nearly all public works projects to occur. The ByDesign project, however, is not a city-managed project and was conducted at an early stage in the process of implementation. Many members and stakeholders believed that the charrette embodied adequate public engagement for this project. "I think that it can be improved, certainly. I think more outreach needs to be done and could have been done with more time and capacity, but not necessarily at this stage

in the process. What we do not want is to get involved in the Eugene planning process as evidence of the South Willamette roadway plan. That is a rabbit hole that none of us would survive." Another member added, "I don't think we should involve the broader public at this point. I think it's an internal project at this time, and this aspect of the project should be engaged in the future."

Majority of stakeholders agreed with the members' public engagement. "The amount of public engagement resources allotted per project is something that we struggle with and I don't think there is an easy answer to that. For this project, I think you have done adequate public outreach at this time," said one stakeholder. One stakeholder would have liked to see a little more public engagement if possible. "One charrette may have been a little thin. Maybe you could consider conducting hour long workshops and focus groups with the City of Eugene, the main project stakeholders, and the actual users of the street (drivers, bicyclists, pedestrians, bus riders), and a group that representatives from the UO in general"

Data Collection

The common feeling by both group members and stakeholders was that data collection was necessary for this project to gain credibility. Understanding the conditions of the roadway and surrounding land uses allowed ByDesign members to objectively analyze alternatives and make recommendations. One stakeholder stated, "[y]ou need to know what you want and then build a case for it." Another stakeholder agreed with this sentiment, "there is a whole lot data gathering and observation that needs to be done before you can even talk to anyone knowledgably about what is happening." ByDesign members agreed and one said, "I felt confident in our data collection and the processes that we used, and it helped me feel comfortable presenting our work to the public at the open house."

Stakeholder Buy-in

Student-driven projects can, and probably are, happening every day with little notice or impact. While the primary goal for the ByDesign project was to provide real-world experiential learning for the group members, students also wanted their work to go towards improving the transportation and livability in the Eugene-Springfield

community. Without buy-in from the relevant stakeholders, the ByDesign project may have gone unnoticed, ultimately ensuring its demise. This did not happen.

Confirm stakeholder buy-in

A common theme from the members and stakeholders was the importance for student-driven projects to receive buy-in from relevant stakeholders. ByDesign members and stakeholders credit the group's strong connection and prior collaboration with the relevant stakeholders in the community. "A huge strength is the group's ongoing relationships with Eugene, Springfield, and Lane Transit District (LTD), and its ability to call upon these relationships when needed," said one stakeholder. On member believes that LiveMove's history of community collaboration, and engaged, educated members "engendered stakeholder buy-in and desire to hear the sentiments and ideas from the student by the city. Not many other cities will place trust in a student organization to develop this plan by showing up and dedicating their time to it. This is a strength because it helped legitimatize the process."

Information Sharing

The stakeholders believed that information sharing was something to be desired at certain points during the project. One stakeholder said, "For student projects, it's important to have leaders who communicate well with its stakeholders. This is a student project, and I hesitate at points because of past experience with these types of projects. They often are a bit unfocussed at times and can fall apart with little to no responsiveness or follow through." Another stakeholder recommended "you maybe should have considered developing more regular communication practices with the stakeholders. Both to keep us informed but also to build our excitement about what you were finding by tossing out little teasers from your data results. I heard murmurs, but was not ever fully certain what was being found."

Political Support

Members and stakeholders both saw varying forms of benefit from the ByDesign student-driven project; however, implementation in any form is uncertain. A common theme from both parties was that political support must come in some form for any change to happen. "For projects such as ours to be implemented it takes three things: political buy-in, capacity for the planners and engineers to plan and design this project,

and it takes funding. It's a godsend if all these three align, and it's really hard to pull this off. However, if you have political buy-in you stand a better chance at getting the other two to fall into place," said one member. One stakeholder agreed, and made recommendations for how to gain this support. "The elected officials get to this level of planning when there is enough community support and interest to make it worth their while. So it's not necessarily about convincing staff to move forward with something. It's really about getting council's ear on something, and making it feel like it's a priority that doing nothing is not acceptable."

Professional Networking

ByDesign student members led the project's direction, which benefited their educational development. At the same time, however, many members expressed the ability to learn from and build professional networks with the project stakeholders' was not used adequately. "I would have liked to see the city be more involved at ByDesign meetings. This would allow us to build better relationships with area professionals, but also to learn from their experience," said one member.

V: Analysis and Recommendations

The purpose of this research is to conduct a case study of the LiveMove ByDesign process and evaluate the experiential learning outcomes from this innovative student-driven project. ByDesign completed the project in June 2013, and members hope that their work will act as a primer for improved safety and accessibility by means of roadway redesigns for the 13th Avenue Downtown-Campus corridor.

The findings from the ByDesign focus groups, project stakeholder interviews, and personal observation allow for further analysis and recommendations to be developed that can enhance the student-driven experiential learning project model in years to come.

Analysis of findings

An analysis of key themes from the research findings can be grouped into six main categories.

1. **The student-driven project model provides positive experiential learning opportunities not available in classrooms.** The opportunities for students to learn from peer-to-peer interaction, communicate and learn from professionals, and develop a project problem statement, scope, and work schedule were important components of the project for the group's members. Through experiential learning, ByDesign members understood that they were building new skills, gaining new experiences engaging in real-world projects, and were able to plan and proudly present their own innovative and professional work to the community. This experience was rewarding for the group and was something the members were proud to be part.
2. **The student-driven project model requires committed students with knowledge of the project issues and a diverse set of skills.** ByDesign members felt that without committed students trying to expand their own education through research to positively impact their community, this project would not have happened. Further, without the diverse set of skills present for the team to call upon, this project would have been further limited in scope and practice. Commitment likely flowed from the members' inherent experience using 13th Avenue for their daily commute coupled with a strong interest in alternative

transportation and community livability, due to their already present role in LiveMove.

3. **The student-driven project model can fill a void or capacity gap for communities.** At completion of the ByDesign project, the members felt that they were able to address sensitive issues, such as roadway safety; develop and introduce innovative ideas into the public domain; and raise awareness of cutting edge research and practice for area professionals. From their work, it became clear that 13th Avenue represents a safety issue for the City of Eugene and the UO campus community. If nothing else, this all-encompassing acknowledgement by students, community members, and public agencies represented a major improvement. Prior to the project, no one at the professional level had raised serious concerns. After the project, it's estimated that neither the city nor the university could continue to do nothing about this problem.

   The issue of safety would have never been unearthed or elevated in a proactive manner without the students' work. In raising this issue and finding universal support, the group could develop innovative alternatives to allow the group's vision to be presented in a relatively safe climate with limited backlash from residents or business owners. In the process, ByDesign advanced the realm of possibilities for roadway design in the City of Eugene.

4. **The student-driven project model requires a problem area and scope that can be addressed by student group's interests and capacity.** ByDesign members expressed the feeling that selecting a project that is both important to them and also fits within their capacity constraints is important for any student-driven experiential learning model's success. If the project does not fit the students' interests or desires, they are less likely to engage in the project. If the project does not fit the students' capacity, the project will likely not get completed or will not be done in a professional manner. Thus, the problem area and problem scope is highly important and should be thoroughly considered.
5. **The student-driven project model provides opportunity to access professionals for advice and mentorship.** The student-driven project model provided ByDesign members opportunities to call upon area professionals for

mentorship, guidance, and direction for the project. Additionally, this opportunity built the group members' understanding of the transportation profession and improved their comfort engaging professionals.

6. **The student-driven project is restricted by student schedules.** The group members believed their academic schedules and other responsibilities were the largest hurdles to overcome. This hurdle may appear too large for some; however, with the right team and management, this obstacle should not prohibit innovative, driven students from putting their best knowledge, skills, and practice into action to create real-world change.

Recommendations

This research highlights benefits of student-driven projects that provide educational experience while also enhancing municipal governments' ability to adapt and address community needs; importantly, it also identifies opportunities to improve the effectiveness and success of student-driven models. LiveMove, other student groups, and civic groups throughout the country may transfer the lessons from the ByDesign student-driven project for other needs. Recommendations to improve future student-driven project models are included below.

Leverage Student Status

While enrolled in school, students fill a place that can be leveraged to make student-driven work a useful, productive, and important way to push forward innovative ideas and surface politically-sensitive problems. Although students may lack the knowledge, skills, and experience of working professionals, their enthusiasm and innovative ideas are not likely to receive the same political scrutiny as professionals upon release of ideas and designs to the public. Students are free from having to use the normal functions and processes undertaken by professionals, which may allow for wider discussion and dissemination of their ideas in the first place. Additionally, students are researching, traveling, and experiencing the cutting edge practices that are being implemented throughout the world. Finally, student work is relatively cheap when compared to professional staff or consultant fees.

Students are granted institutional and community support by calling upon thought leaders and innovators around the U.S. and the world. ByDesign has been able to call upon these types of people in supporting its vision and design alternative for 13th Avenue. This support grants the students the credibility needed to raise issues with outdated problem statement development or models that don't actually address changing demographics or matchup with case studies throughout the world. Lastly, students are allowed to be visionary, dream, and be 'risky' in their approach, plans, and designs. They are not held to the same expectations for processes, standards and budgets as professional staff, and can focus on desired outcomes. Student work is politically safe and should be supported by city leaders trying to find ways to address politically sensitive issues, but do not actually have the political capital to raise the issues themselves.

Thus, student-driven project members and team leaders should be wholly conscious of their student status, and they should not be afraid to seize this space; exploring it; and maximizing its potential.

Explore Ways to Motivate Volunteer Members

The ByDesign student-driven project was wide-ranging, and required many hours from its volunteer members to complete successfully. The students were motivated by the potential to learn new skills and be part of a team trying to create real change they are committed to. The incentive available to ByDesign group members to travel to conferences in return for volunteer hours and the ability for members to register for a two credit independent study course worked for this project. These tools may not be available for groups at other Universities. For this reason, committed students should explore different and alternative ways to incentivize volunteers to donate their time and efforts. One idea is to expand professional development and engagement opportunities with the project stakeholders. Others exist; be innovative.

Partner with other student groups

Throughout the project, stakeholders asked for the group to address varying issues that fell outside the project scope, including broader public engagement and expansion of roadways under consideration. The ByDesign team, largely due to other responsibilities,

was unable to take on these requests. In developing the problem statement and scope, it is recommended that future student-driven projects consider partnering with other student groups or professionals to expand capacity. Groups to consider at the UO include the Association for Public Participation, the Sustainable Business Center, and the Environmental and Natural Resource Law Center.

Invite community members and stakeholders to join team

One issue to consider not yet mentioned is that students graduate and leave, thus creating turnover in student groups. Turnover creates concern because of the potential to lose institutional knowledge and a requirement for new leaders to build trust with stakeholders from past projects. To address this issue, it is recommended that student-driven experiential learning projects invite interested community members and stakeholders to join the project group. By doing this, the student group expands the whole community's capacity and education, which better ensures that future projects have the knowledge, skills, and training to successfully complete this innovative project model.

Communication is Necessary

Should the student-driven plan and redesign ever be implemented, communication will be crucial a factor of this success. It takes strong partnerships with professionals and decision makers to receive the trust to take on a project of ByDesign's scale. These partnerships must be nurtured through timely updates and check-ins with stakeholders to ensure the project stays on their radar. It is recommended that this is accomplished through regular emails to update the stakeholders and group member to inform them of the project's progress. If possible, student groups should develop and regularly update a webpage and calendar that allows community members to stay informed of the project's progress. Additionally, groups should look to new media outlets such as Facebook and Twitter to provide easy dissemination of project information to the broader public. Communication allows for improved buy-in, project understanding, and the ability for people to feel as though they are part of the process.

Further research

LiveMove ByDesign is certainly not the only student group in the U.S. conducting work of this nature. While the group may prove to be one of the more

successful student groups should its plan and redesign be implemented in some nature, there are groups on the UO campus trying to achieve similar outcomes through a form of student-driven project models (e.g. designBridge and the Sustainability Center). Future research may consider conducting case study analysis of these groups' processes to validate or modify this research's recommendations. From this analysis, there is potential that model student-driven project development and processes could be developed; however, each project and group is often different in many functions and personnel.

Conclusion

The research suggests that student-driven projects can provide valuable experiential learning opportunities for students not available within the classroom. This includes development of skills such as design, project development and management, personnel management, schedule development, and professional presentation and writing abilities. Further, the student-driven project model, under the right circumstances, can prove beneficial in providing innovative and realistic ideas to address real problems in our communities.

America's cities are facing challenging times, with budget gaps leading to capacity constraints. At the same time, its residents' preferences for travel and housing are changing, requiring new designs to accommodate new types of development. These preference changes require new ways of thinking from municipal staff. To help fill municipal budget and capacity gaps and enhance the development of the next generation of American professionals, cities can and should look to student groups such as LiveMove at its colleges and universities to develop innovative and affordable ideas, designs, and recommendations to address the changing needs of its citizens.