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### Springfield's Legacy: A Vision for A Transformative Transit-Oriented Union Station District

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Landscape Architectur & Regional Planning

# SPRINGFIELD'S LEGACY: A VISION FOR A TRANSFORMATIVE TRANSIT-ORIENTED UNION STATION DISTRICT GRADUATE URBAN DESIGN STUDIO SPRING 2020

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UMass Amherst Design Center in Springfield
Department of Landscape Architecture & Regional Planning
In collaboration with the City of Springfield Office of Planning and Economic Development
Graduate Urban Design Studio Spring 2020 • Professors: Michael DiPasquale and Frank Sleegers

Cover Page:
Market on Stearns Square

2020 TTOD Urban Design and Planning Competition winners Jiaqi Guo, Bryce Lloyd-Hahn and Chris Ramage for "IN THE LOOP"



Studio walking tour along upper Lyman Street.

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#### **Special Thanks To:**

Mayor Dominic Sarno, City of Springfield

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Michael Wang + John Rufo, Principals, Form + Place Urban Design
Alex Weck, Head of RADSpringfield

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#### **Competition Organizers and Coordinators:**

Tracy Corley Ph.D and Rachel Klein, MassINC

#### **Studio Professors:**

Michael DiPasquale + Frank Sleegers

#### **Students:**

Keith Benoit • Nigel Cummings • Caitlan Davis • Kinjal Desai • Marcos Gonzalez • Jiaqi Guo • Olivia Ashjian James
Anna Kellerman • Bryce Lloyd-Hahn • Stephen McCusker • Chris Ramage • Jessica Schottanes

#### Book Designer + Editor: Nigel Cummings



Mural - Corner of Taylor and Main Street - 2019 freshpaintspringfield.

#### We Would Like To Express Gratitude To:

Mayor Dominic Sarno, City of Springfield and the Office of Planning and Economic Development, Timothy T. Sheehan, Chief Development Officer for Financial Support to make this studio and our work possible.

A very special thanks to Scott Hanson, Principal Planner, and Brian Connors, Deputy Director of Economic Development, for their ongoing commitment to UMass and our students. To Alex Weck, head of RADSpringfield, and RADSpringfield Youth for providing valuable input and design suggestions.

Additionally, we are grateful to MassINC with Tracy Corley, Ph.D., and Rachel Klein for organizing the Gateway City TTOD Planning and Design Competition and providing an innovative platform to present our ideas. We benefited greatly from our ongoing collaboration with Davenport Development, Chuck Irving, and Joy Martin. We were fortunate enough to work with consultants from Form + Place, Michael Wang, and John Rufo.

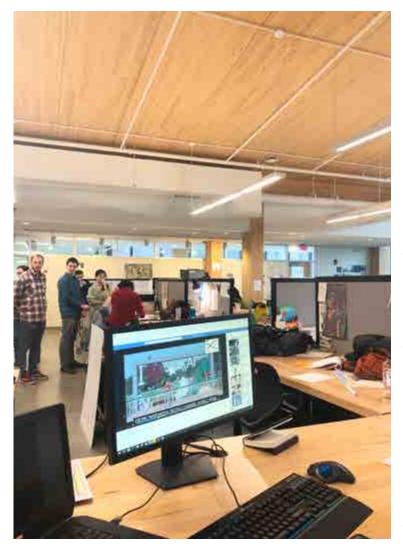
Finally, we thank our inquisitive and enthusiastic students for the work they produced throughout these challenging times. We hope the ideas laid out in this book will be useful in future planning endeavors, and we are especially thankful to our student Nigel Cummings who created it with care and passion.





#### **Urban Design Studio**

The Spring 2020 Urban Design studio began in a typical fashion. Teams performed site visits, area analyses, and worked together to paint an accurate picture of the social and natural processes in the Union Station District. However, days after the midterm presentation, it became apparent that Covid-19 would severely impact the way we worked. Seemingly out of the blue, we had to adjust to remote learning-students left the campus, with many returning home to ride out the quarantine. The second half of the semester was full of anxiety and uncertainty. Our professors were tasked with having to instruct and engage with us in a previously underutilized format. We students also had to adjust to remote learning while simultaneously handling a new way of life.

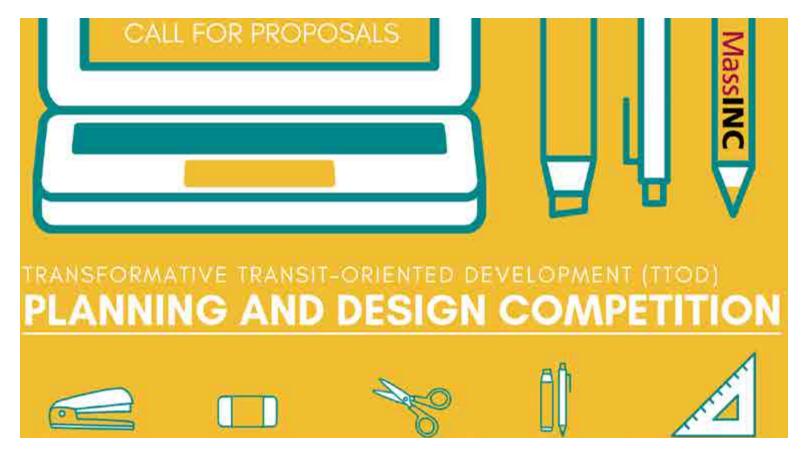


Students and instructors were forced to adapt quickly. For some of us, meeting three times a week was the primary social contact, sharing living rooms and kitchen tables virtually. Students demonstrated resiliency to these strange new conditions. We worked most ambitiously on design proposals, developed rigorous design concepts around equitable housing and transportation, engaged virtually with the Springfield Planning Department, and our community partner RADSpringfield to empower the underrepresented bicycling youth in Springfield.

The studio was fortunate to have participated in the MassINC and Gateway Cities Innovation Institute for the first Transformational Transit Oriented Design Competition (TTOD). Each team submitted excellent work that consisted of an online slide presentation that included professional competition boards. Every team went above and beyond. Studio teams competed against some of the most prestigious Urban Design programs in the country, and one of our UMass teams was awarded first place.

Our studio work increased the visibility of Springfield in the Commonwealth and within leading urban planning agencies in New England. We anticipate that this success will lead to further engagement, grants, and funds that will be beneficial for the city.

 $^{9}$ 



See TTOD award ceremony here: https://www.youtube.com/ watch?v=aluHXKgwUzw

"In fall of 2019, Dr. Tracy Corley, transit-oriented development fellow at MassINC, called on Massachusetts' college students to partner with city staff and community organizations to envision equitable transit-oriented neighborhood plans and projects in Gateway Cities. Faculty and student teams from Harvard, UMass Amherst, MIT, and Northeastern University answered the call. Earlier this month, five judges from Nelson/Nygaard, the Institute for Transportation and Development Policy (ITDP), the Lawrence and Lillian Solomon Foundation, Massachusetts Housing Partnership (MHP), and the Barr Foundation have selected a winner of the competition, based on how well their projects connect places of activity and growth with downtown passenger rail stations." (MassINC) UMass LARP was rewarded the first place for the design presented by Jiaqi Guo, Bryce Lloyd-Hahn and Chris Ramage titled In The Loop.

## Competition Requirements:

"This competition connects student teams with Gateway City planning/ development teams and community-based organizations (CBOs)/ advocacy groups to create an innovative plan or project that will connect important places of activity and growth with high-capacity transit hubs. Each proposal can be a visionary plan, pilot program, or tactical project in transit-oriented districts—the half-mile areas around multi-modal train stations or bus hubs." (MassINC)

#### **Evaluation Criteria:**

- Diversity + Inclusion
- Relevance
- Innovation
- Feasibility
- Participation
- Equit

#### **Studio Program:**

The completed design must provide the following:

- 2,000 new units of housing
- New commercial options
- Public programming + spaces
- A transit-oriented design
- Dedicated spaces for cyclists
- Access to open space
- Enhance the sense of place
- Incorporate green infrastructure



**Vacant Lot on Lyman Street** 



Union Station has one entrance on Lyman Street. The elevated tracks are supported by a massive granite wall.

#### The Legacy City

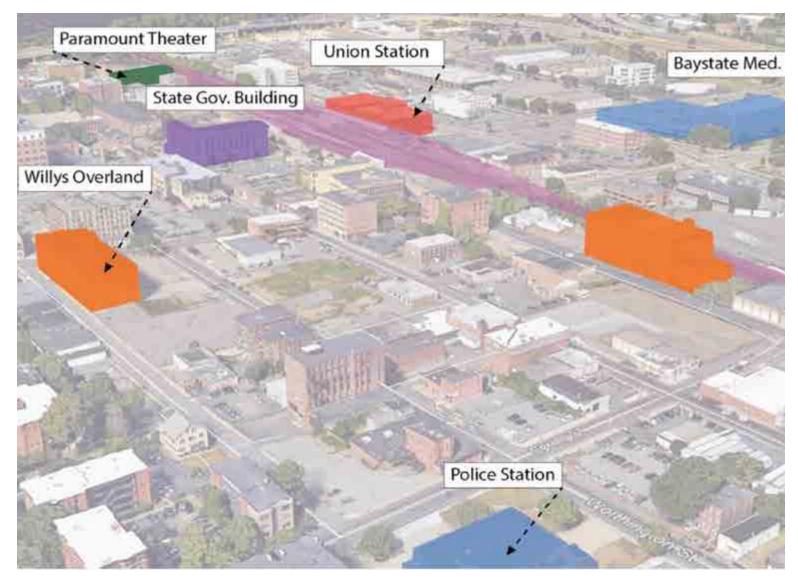
Before we began the process of analysis and conceptualization, the studio began with an in-depth discussion of the legacy city. American legacy cities like Springfield, Detroit, Buffalo, Cleveland, and many others experienced exponential growth and influence during the country's industrial revolution up until the early 20th century. These were cities whose names were once synonymous with specialized industries. For example, Springfield was known for its thriving automobile industry and skilled, diverse workforce and was once the only American city that produced the luxurious Rolls Royce.

With the rise of suburbanization and a shift away from industry, the legacy city suffered a tragic decline in population and a noticeable loss of density. Springfield was at its peak population in 1960, with around 170,000 residents, whereas in 2019, there were just 153,606 residents. These are cities that should be experiencing consistent population growth, but are not.

Additionally, these American cities often serve as stark reminders of segregation and a decline in economic opportunity. Their residents face issues related to a lack of municipal and social resources, poverty, lack of employment, relatively weak demand in their housing markets, and disinvestment from property owners leading to a declining quality of available building stock.



Vacant lots and distressed buildings on Alert Street and Fairbank Place provide opportunities for creative adaptive reuse.

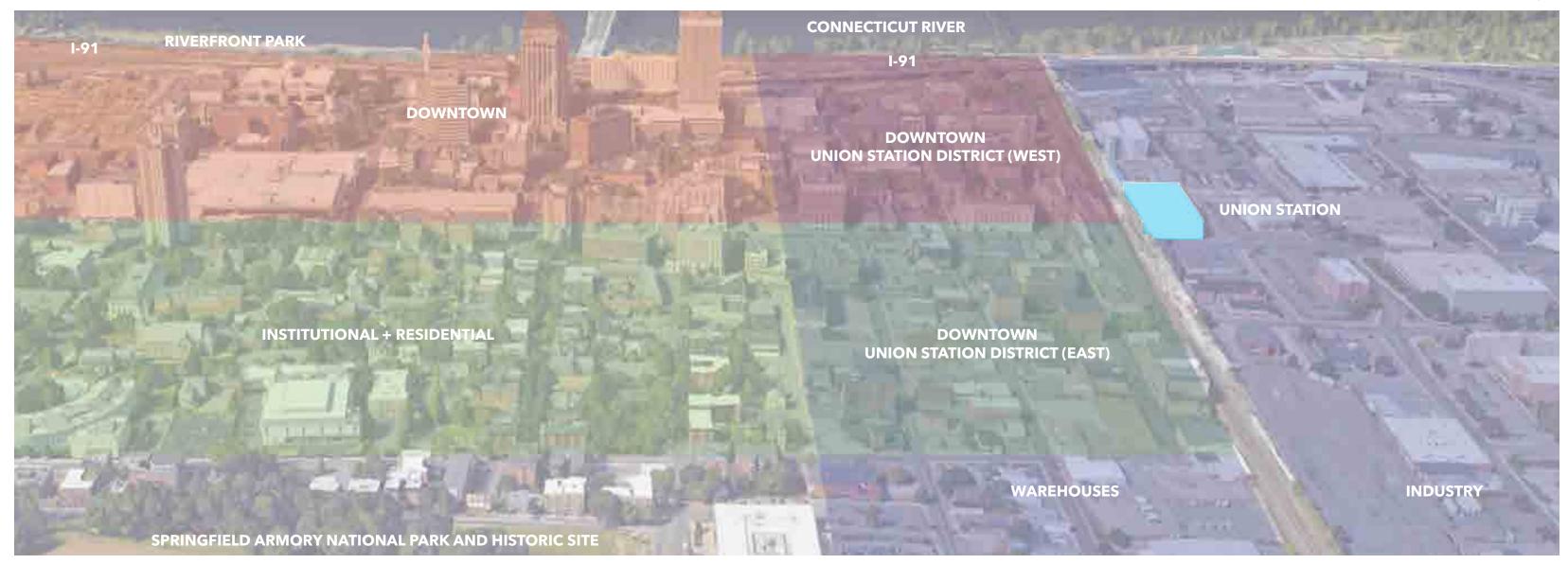


Numerous historic and regional assets are found throughout the Union Station District.



Four commonalities and challenges faced by American Legacy Cities.

However, these small to medium cities are full of potential and hidden assets. Stable neighborhoods and communities of residents who have extensive recollection of how these cities used to be are priceless. Springfield is home to three higher education institutions and is a part of the Knowledge Corridor, which brings around 160,000 university students to the region. Additional assets include a plethora of historic buildings and landmarks, multi-modal transportation networks, traditional, walkable downtowns, a densely populated downtown, vibrant ethnic communities, nonprofit and community-based organizations, thriving and influential arts and cultural facilities, and stable local governments. However, the issue that many legacy cities face is that while existing assets have the potential to attract population growth and economic opportunity, there is a substantial need for outside financial investment. Each city is different and requires a slightly different approach, but the need for cooperation between existing residents, business owners, and local and regional governments is essential.







#### History

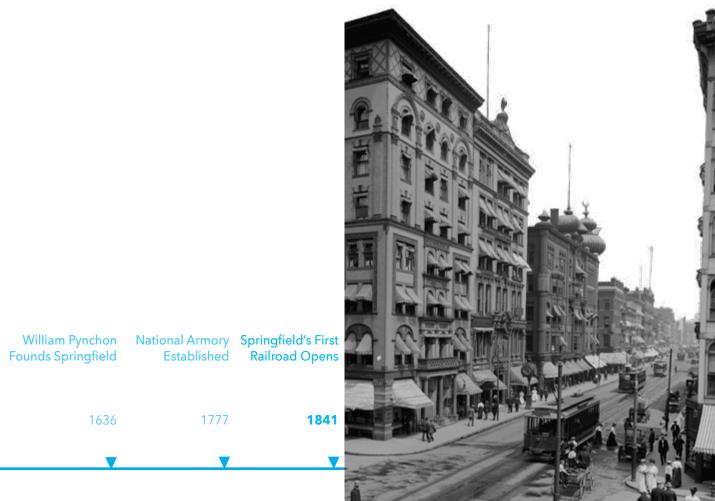
With Springfield once serving as the premier industrial hub of the region, the history of the city is fascinating. Over the centuries, it has been home to numerous industries, cultures, a diverse population, and many historical events. Springfield is known by many names. City of Firsts for the countless innovations its populace has developed, City of Homes due to its Victorian architecture, and the City of Hoops as Basketball was invented there. Additionally, there have been multiple iterations of train stations that saw an average of just under 100 trains per day at their peak.



**Union Station, seen from Lyman Street around 1905.** *Library of Congress* 

#### Area Analysis





Agawam and Nonotucks Settle on the Connecticut River

1636

1777

8000 BC

Peak E Immig Sp
Main i

Peak European Immigration to Springfield	Zenith of Union Station	National Armory U Closed	Jnion Station Closed	Natural Gas Explosion	Union Station Reopens
1848-1880	1926	1968	1973	2012	2016

in Street trolleys, seen looking south from the corner Worthington Street around 1908. Library of Congress.

#### **Demographics**

#### **Median Household Income**

ly and range between extreme poverty to just average if compared varies between 54 and 98%. Design and planning has to embrace the \$35,742 median income of the City.



54% individuals in downtown live below poverty.

#### **Percent Nonwhite**

The median household incomes by U.S. Census 2016 vary significant—The larger Metro Center has a proportion of Nonwhite residents that ethnic and cultural diversity.



50% households speak predominantly Spanish - 50% are linguistically isolated.

#### **Population + Units**

Only 8,520 people live in our area and occupy 4,810 units. This number ranges between almost 5 to 1,5 individuals per unit. Singles live predominantly in the core downtown districts.



Silverbrick Lofts offer downtown rental housing.



Studies show that 2000 new units are feasible and could activate downtown.

#### Area Analysis





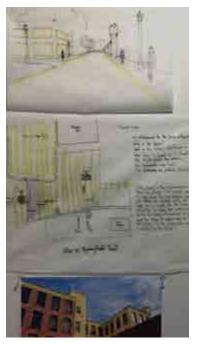






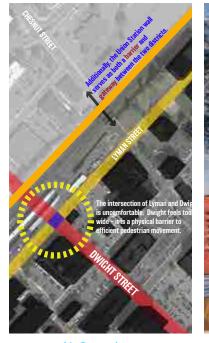








buildings and late from three leaves the developer, the





B. Lloyd-Hahn

J. Schottanes

N. Cummings

O. Ashjian James

#### **Site Visit + First Impressions**

A week after the start of studio, we traveled to Springfield to the Union Station District to perform an in depth site analysis in order to understand the current conditions of the area. This initial visit served as an introduction to the area, allowing us to take inventory of the various strengths, weaknesses and opportunities that our groups would later capitalize on in our proposals. We visited the Willys Overland building, a historic property which will soon welcome its first residents as well as other key places and businesses. After this we were tasked with developing both a mental map of the area as well as creative interpretations of our experience of the district. This was an initial step as it allowed us to process our spatial experiences and turn them into visual representations of said experiences.

#### **Street Character**

The Union Station District is a post-manufacturing area in Springfield. Even before the 2012 Gas explosion, this area had a high number of vacancies and underutilized lots. This is specifically applicable to the eastern portion of the district. Currently, the street character provides a hostile pedestrian and bicycling experience. Narrow sidewalks give way to much room to the street with little definition between foot and vehicular traffic. Trees are largely missed. While more recent public art has enlivened some of the streetscapes in the western area of downtown, the areas in the eastern portion of the district seems undervalued and bleak. The Union Station district is, however, lucky to have a dense street grid that aligns with the area's industrial and transportation history. The vacant lots and many older buildings offer opportunities for adaptive reuse and Photos via Google Earth.



**Lyman Street** 











**Main Street** 



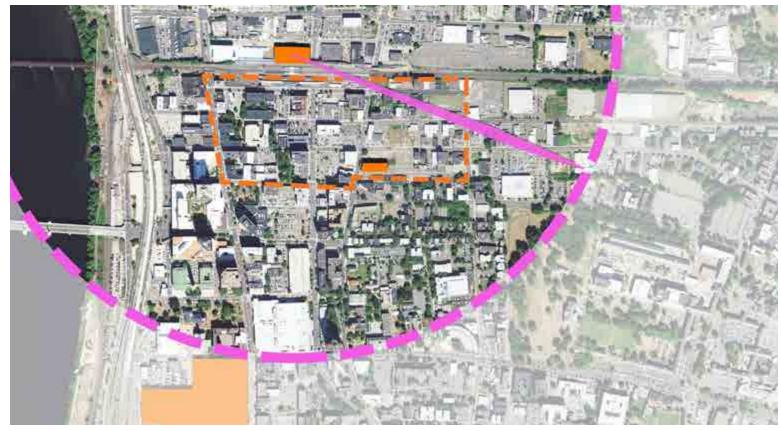


Winter Street **Worthington Street** 









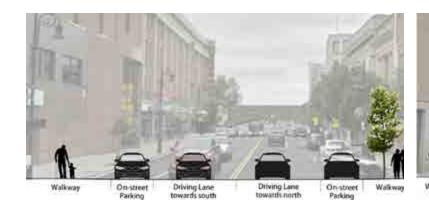
The 0.5 Mile / 10 Minute walk radius with Union Station as its departing/arrival point.

## Street Systems + Walkability

The 10 minute/0.5 miles walk radius above illustrates the Union Station District's proximity to numerous Springfield institutions and cultural amenities. Additionally, the district borders the city's downtown, an area full of local businesses, historic properties, and open space. However, the district itself is lacking in amenities and its streets are less than ideal for pedestrians or cyclists. Narrow sidewalks are trumped by wide streets and the pedestrian experience feels hostile at times. As the area currently has few attractions, many of the people on the street are either residents.



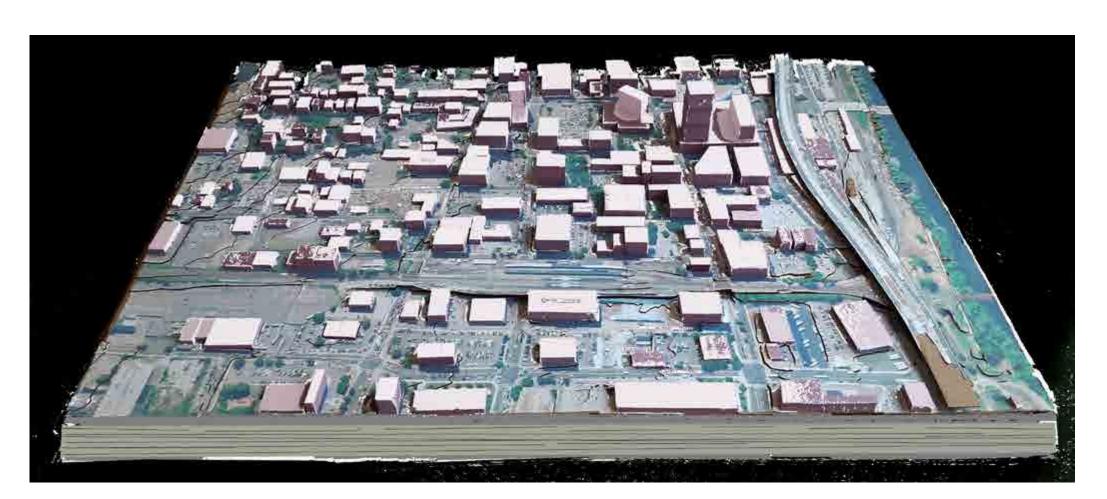
Surface +garage parking is abundant within the Union Station District.

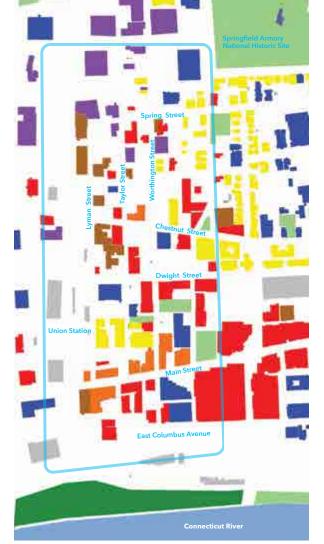


Distribution of street functions and conditions on Main Street.



Distribution of street functions and conditions on Dwight Street.





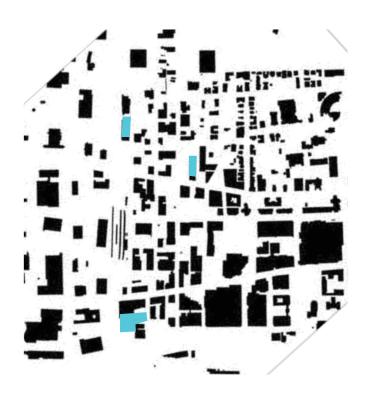
Commercial Mixed Use Residential Institutional Public Open Space Forest and Natural Industrial Transportation Vacant

Urban Grain - Physical Model of the Project Area Facing South

Major Existing Land Uses in the Area

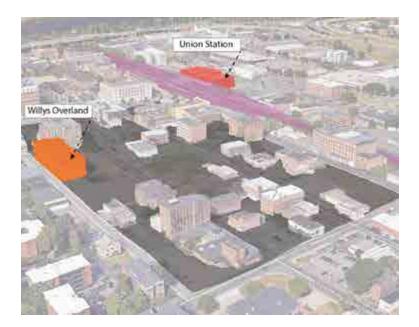


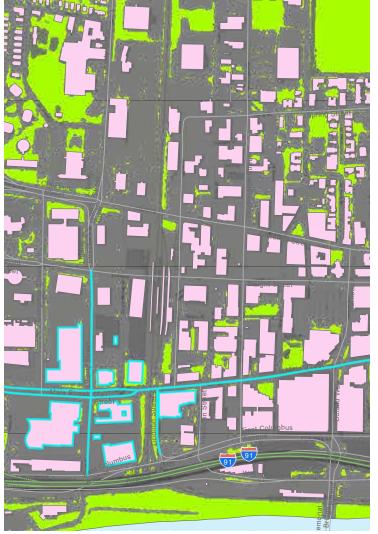
Impervious Surface and Urban Grain



The City of Springfield is a legacy city that has seen a significant loss of urban grain. Over the past century, the Union Station District has witnessed an even greater deal of density loss, as seen in the images above. To the left is the urban grain of the District in 1920 versus 2016. The lack of a cohesive streetscape creates an environment that feels uncomfortable and unsafe. Wide gaps between structures further this sensation. Additionally, a large amount of surface area within the district is not permeable. There are many surface lots and abandoned lots that residents and businesses use for temporary parking.









Nigel Cummings Kinjal Desai Olivia Ashjian James A New Worthington: Linking People + Places

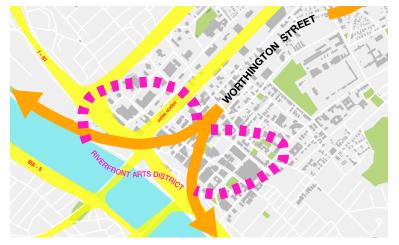
"A New Worthington creates opportunities to integrate people and places for a rich urban experience. Innovative tactical, social, ecological, and economic incubators along a 1.2 mile linear park stretching down Worthington Street will activate the Union Station District for sustained equity and social change."

## A NEW WORTHINGTON LINKING PEOPLE + PLACES



A New Worthington illustrates how to elevate existing assets and create exciting new experiences. Worthington Street stretches from the McKnight residential neighborhood through downtown Springfield, linking people to places. It has the potential to offer a quintessential urban experience with thriving local businesses, bike paths, parks, and opportunities to engage the broader public. Lined with existing and potential assets, Worthington Street serves as the spine to the Union Station District and can provide a wealth of amenities to the city, increasing opportunities for economic mobility. A 1.2-mile linear park stretching down Worthington will simultaneously activate the street and become an engaging travel experience. A connection to the proposed Arc of Recreation bike trail through Glen Road onto Worthington will enhance recreational options and promote public health. Its proximity to Union Station creates an opportunity to strengthen regional connections by acting as a catalyst to economic investment. In addition, major interstate highways cross through Springfield, offering local and regional access. This improvement to transportation infrastructure will increase the economic and social mobility within the community.

A new Riverfront Arts District located along the historic Connecticut River will become both a regional and local draw, elevating the arts in Springfield while offering social amenities. The reopening of Paramount Theatre and CityStage within this district, along with new arts and cultural opportunities will highlight the historic significance of Springfield's innovative and diverse culture.

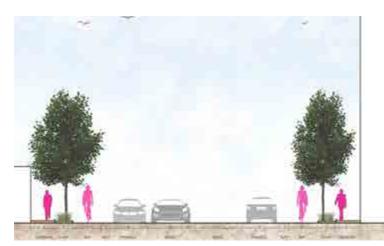




#### **INCUBATORS**

In order to better link people and places, we propose altering major arterial streets to accommodate two-way traffic, including Worthington Street, Dwight Street and Chestnut Street. This will incentivize businesses to locate on these streets due to increased access. The resulting narrowing of roads will also have a traffic calming effect while promoting the establishment of a pedestrian-oriented culture, typical of great cities. In addition, incorporating protected two-lane bike paths into the street infrastructure is essential to becoming a diverse, multi-modal city. Incubators are intentional interventions that create opportunities for a rich urban experience. The integration of tactical, social, ecological and economic incubators added along Worthington and its adjacent streets can drive equitable, impactful change to the city as a whole. Encouraging the overlap of these incubators provides the people of Springfield with an ever-changing, dynamic urban experience that inspires participation and community stewardship.

#### Proposed Changes to Dwight Street and Lyman Street.



**Proposed Dwight Street Section** 



Union Station Arrival Treatment

The four incubators Illustrating how the incubators are integrated into the Worthington Street linear park.



**TACTICAL** 

Tactical urbanism porary, low-cost interventions to create flexible spaces that meet the needs of the community.



SOCIAL

Social opportunities that create "live-work-play" dynamics are achieved by offering a variety of events, attractions, employment, and living options.



**ECOLOGICAL** Ecological

green open

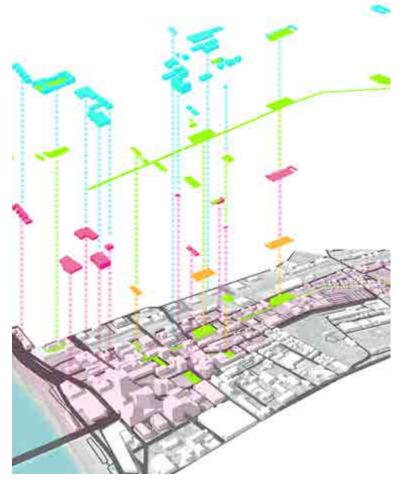
cover.

needs of the community must be addressed in the process of revitalization. spaces, storm



**ECONOMIC** 

Economic mobility activated by attracting investment and improving existing assets. This includes new Adaptive reuse of open space and buildings offer opportunities to management, and ignite imaginative increased canopy new means of growth.



#### A New Worthington: Linking People + Places



**TACTICAL PHASE** 

The Tactical Phase can kickstart revitalization of Springfield's Union Station District by claiming spaces for the community to thrive. Introducing makeshift bike lanes, increasing connections by temporarily closing Keynor Street for weekend markets, a bike park in the proposed Worthington Street Park site, and using the new Urban Farm location for farmers markets can begin the transformation of downtown.



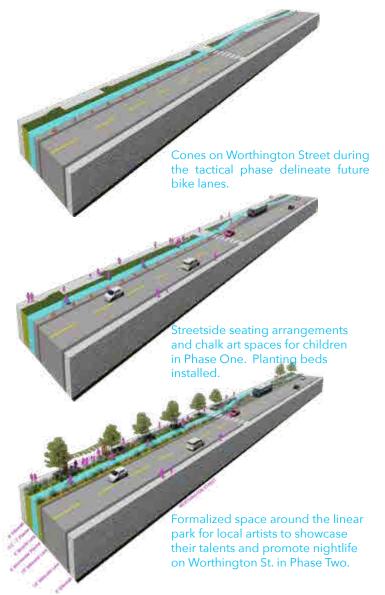
PHASE ONE: 1 - 10 YEARS

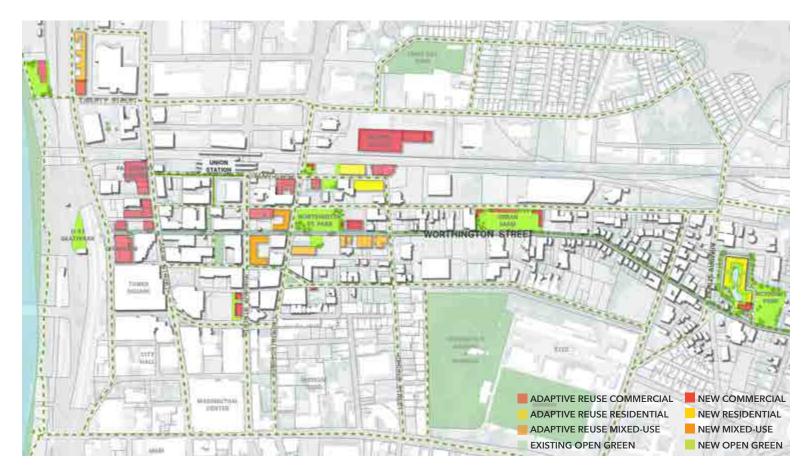
Phase I will begin the redevelopment of existing buildings including reopening Paramount Theatre and CityStage as part of the new Riverfront Arts District. A section of the I-91 North Garage will become the U-91 Skatepark as part of this new district. Buildings left empty will be re-adapted as mixed-use and residential, and new open green spaces will be seeded. Basic infrastructure of the Worthington Street linear park will begin development.



PHASE TWO: 10-20 YEARS

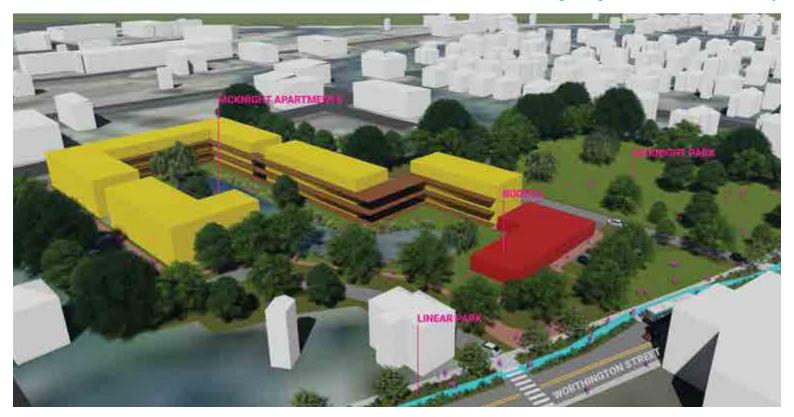
Phase II will be marked by the completion of the Worthington Street linear park, creating a new urban experience for visitors and residents of Springfield. Children's play areas, shaded seating, and spaces for continued tactical urbanism will be available along the 1.2 mile park. New building developments such as the McKnight Apartments and mixeduse buildings along Dwight and Chestnut will increase density and vibrancy. The Worthington Street Park in downtown becomes a sanctuary in the middle of the city. Finally, the Riverfront Arts District will be in full swing and attracting regional and local visitors alike.



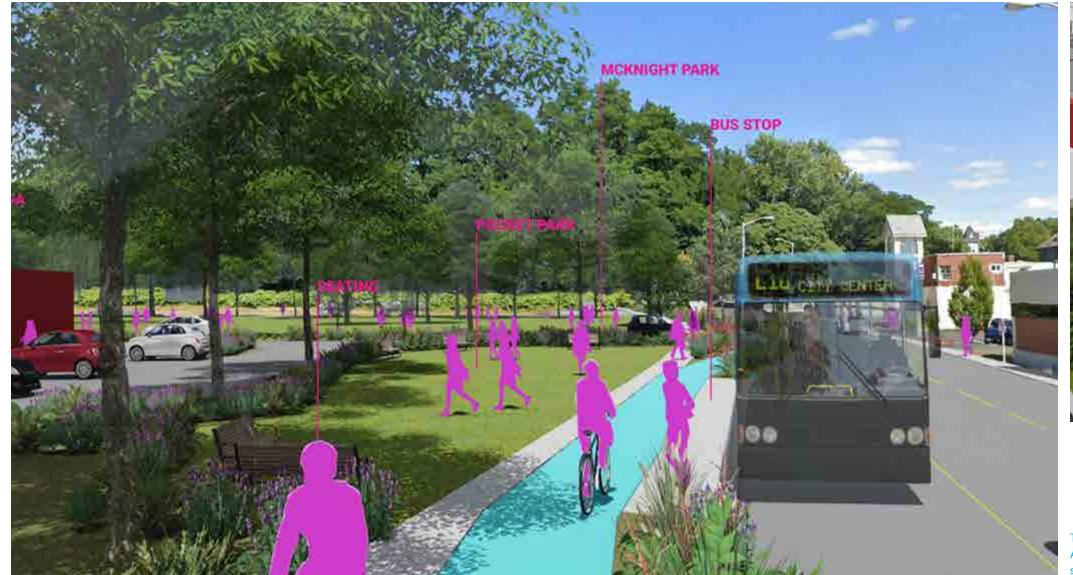


A New Worthington Master Plan

The McKnight Park + Apartments serve as a beginning to the Worthington Street Linear Park, and connects the McKnight neighborhood to the rest of the city.



#### A New Worthington: Linking People + Places





The location of the gas explosion becomes a green retreat in the middle of Springfield surrounded by restaurants, apartments and bordered by the linear park.

The linear park intersects the McKnight
Apartments + Park, becoming a new
space for the entire community.





Worthington Street Park

Connection to the Riverfront Arts District from Liberty Street under I-91



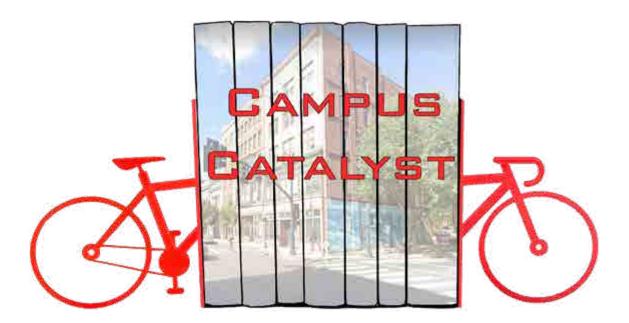
A New Worthington: Linking People + Places Competition Board

A New Worthington creates opportunities to integrate people and places for a rich urban experience. Innovative tactical, social, ecological, and economic incubators along a 1.2 mile linear park stretching down Worthington Street will activate the Union Station District for sustained equity and social change.



Caitlan Davis Marcos Gonzales Anna Kellerman

**Campus Catalyst** 



"A UMass Amherst Springfield Campus will bring vitality and energy of a college campus to downtown Springfield. This project will create new urban infrastructure highlighting biking culture, building community and a connective urban experience."

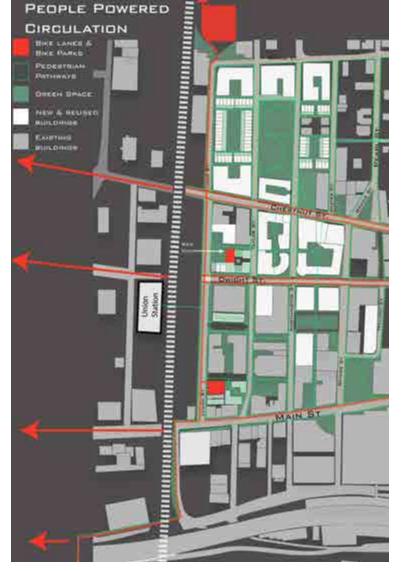
The foundation of our proposal is the establishment of a University of Massachusetts Springfield campus in the heart of the Union Station District. This campus core will serve as the anchor for a fully integrated people powered transportation network, cre-ating an authentic campus feel throughout the district. We envision the campus serving as a conduit between the state, the city, and the local community.

We envision key academic programs on the new campus will be closer to the vulnerable populations they serve. The second tier economic effects of providing amenities, entertainment, and additional housing, clustered around the new urban campus can act as an opportunity for local entrepreneurship.

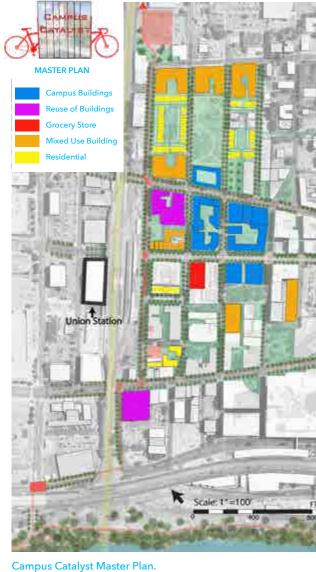
Our proposed campus, as a catalyst for change, is more than just about economics, it's truly about the people.

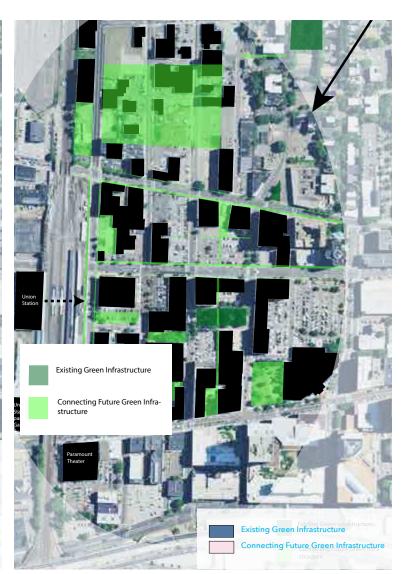
People Powered Circulation is truly the unifying design element throughout our proposal. Similar to a college campus, we focus on increasing pedestrian and biking infrastructure, like ValleyBike Stations, dedicated bike lanes, public bike repair stations, and bike parking options. This deemphasizes the need for automotive circulation and increases accessibility throughout. These modes of transport will re-establish connections with old and newly created destinations throughout downtown Springfield. This type of environment creates a lively streetscape for both residents and travelers to easily explore the post industrial cityscape.





#### **Campus Catalyst**





**Proposed Urban Greenways** 

MultiFamily Elevator Buildings MultiFamily Walkup Buildings

**Current Land Uses** 

56

The final build out of our proposal, will continue to infill vacant sites, continue implementing a complete street network, finalizing green and pedestrian connec-

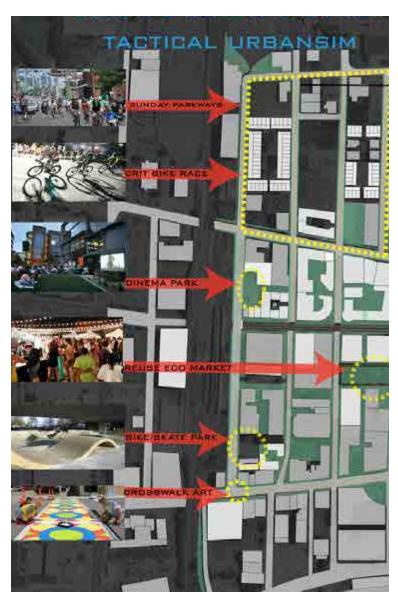
Adjacent to the large green space, we will take advantage of the open lots to design an equitable housing community offering market rate, affordable, and subsidized housing. Townhouses and larger mixed use buildings will surround communal courtyards. In this zone we also expand housing and facilities for the

local homeless population. With a UMASS Springfield campus acting as a cata-

lyst, this three phased approach, combined with tactical rbanism, will stimulate reinvestment and increase amenities, creating a vibrant place where students and

tions, and expanding bicycle infrastructure.

Springfield residents alike will want to build their futures.



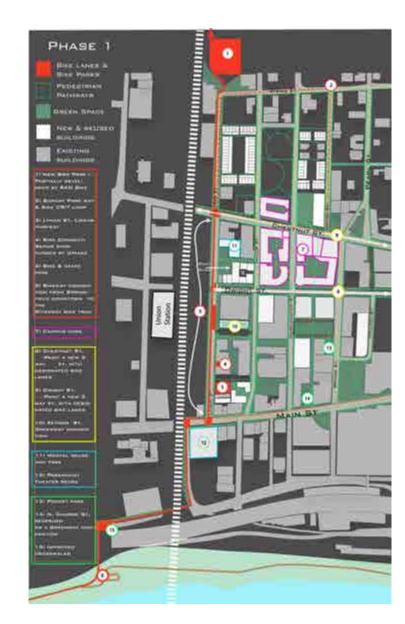
#### **TACTICAL**

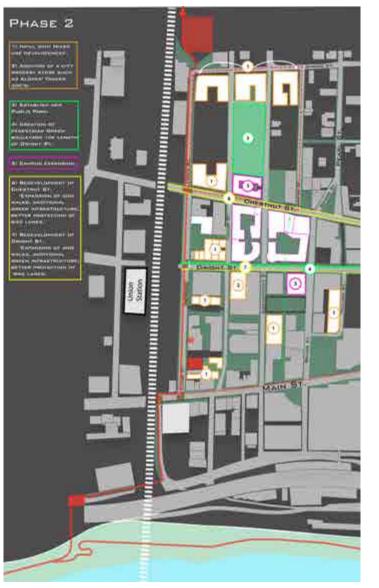
Tactical urbanism interventions through-out the site are key to implementing rapid and targeted PHASE TWO change. These interventions compliment the biking culture unique In Phase Two of three, we envito Springfield and strengthen the sion UMass Springfield will genbers and their neighborhoods.

#### **PHASE ONE**

the core campus amenities on es. We allocate space for the two parking lots. A large protect-Lyman Street's empty storefronts with Etsy maker spaces, UMass hancing crosswalks. run bike repair shop, and spaces for student organizations. A hostel will also be introduced into a vacant building on Lyman st. taking advantage of the increased ridership through Union Station.

bond between community mem- erate an increased demand for amenities to support the campus. We propose the strategic infill of parking lots with mixed-use buildings such as grocery stores, Phase one focuses on building apartments, and small businesscreation of a large public green ed bike lane running down Lyman east of Chestnut Street. This park st will connect the River Bikeway will have a lawn for picnics and to the more residential neighbor- gathering, planted wildlife habihoods of Springfield and will in- tats and a bike/walking path. We clude 3 bike parks. We propose expand the campus footprint to opening Dwight and Chestnut better connect the neighborhood Street to two-way traffic with cor- across Dwight and Chestnut St responding bike lanes. We fill while improving sidewalks, adding protected bike lanes, and en-







Along the new 2-Way bike network at Gridiron Street and East Columbus Avenue.

The improved and activated Union Station District streetscape.





LANDARCH 607/608:

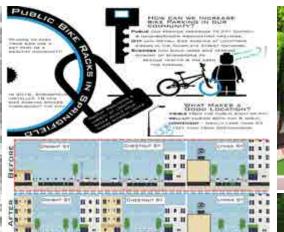
"A VISION FOR SPRINGFIELD'S UNION STATION DISTRICT"

TEAM MEMBERS: CAITLAN DAVIS ANNA KELLERMAN MARCOS GONZALEZ

PROFESSORS: FRANK SLEEGERS MICHAEL DIPASQUALE







NARRATIVE tion District. This campus core will serve as the anchor for a fully integrated people powered transportation network, creating an authentic campus feel throughout the district. We envision the campus serving as a conduit between the state, the city, and the local community. Looking at examples, such as UCONN's Hartford Campus, key academic programs would be located on the new campus and closer to the vulnerable populations they serve. People Powered Circulation is truly the unifying design element throughout our proposal. Similar to a college campus, we focus on increasing pedestrian and biking infrastructure, dedicated bike lanes, public bike repair stations. and bike parking options. This de-emphasizes the need for automotive circulation and increases accessibility throughout. These modes of transport will reestablish connections with old and newly created destinations. We also focus on tactical urbanism interventions that compliment the biking culture unique to Springfield and strengthen the bond between community members and their neighborhoods.

Phase One of our three phase proposal, focuses on building the core of the campus on two parking lots at the center of the Union Station District. This will establish campus amenities to be used by students and the public, such as the Student Union, classrooms, galleries, a dining hall and a rec center. In order to create a cohesive biking network though Union Station District, a large protected bike lane running down the length of Lyman Street connects the Connecticut River Bikeway to Union Station and to the more residential neighborhoods of Springfield. Throughout the bike route we introduce three bike parks. We propose opening Dwight and Chestnut Street to two-way traffic with corresponding bike lanes. In order to fill Lyman Street's empty storefronts we intend to introduce Etsy maker space Umass run bike repair shop and dedicated spaces for student organizations. A hostel will also be introduced into a now vacant building on Lyman st. taking advantage of the increased ridership through Union Station. In Phase Two of three, we envision UMASS Springfield will generate an increased demand for amenities to support the campus. We propose the strategic infill of parking lots with mixed use buildings such as grocery stores, apartments, and small businesses. We allocate space for the creation of a large public green east of Chestnut Street. This park will have a lawn for picnics and gathering, planted wildlife habitats and a bike/walking path. We expand the campus footprint to better connect the neighborhood across Dwight and Chestnut St while improving sidewalks, adding protected bike lanes, and enhancing crosswalks. The final build out of our proposal, will continue to infill vacant sites, continue implementing a complete street network, finalizing green and pedestrian connections, and expanding bicycle infrastructure. Adjacent to the large green space, we will take advantage of the open lots to design an equitable housing community offering market rate, affordable, and subsidize housing. Townhouses and larger mixed use buildings will surround communal courtyards. In this zone we also expand housing and facollities for the local homeless population. With a UMASS Springfield campus acting as a catalyst, this three phased approach, combined with tactical urbanism, will stimulate reinvestment and increase amenities, creating a vibrant place where students and Springfield resi-











#### Campus Catalyst Competition Board

A UMass Amherst Springfield Campus will bring vitality and energy of a college campus to downtown Springfield. This project will create new urban infrastructure highlighting biking culture, building community and a connective urban experience.

 $^{2}$ 



Keith Benoit Stephan McCusker Jessica Schottanes Connect the City: Catalyzing Cycling Culture in Springfield



Envisioning the site of the Gas Explosion as a renewed and activated space for wheels fanatics.



"Connect-The-City seeks to designate a park tailored to the collaborated vision of Springfield's cycling and skating communities." Connect-The-City seeks to designate a park tailored to the collaborated vision of Springfield's cycling and skateboarding communities. This park, positioned between Taylor and Worthington Streets, encourages active users to participate in safety and maintenance workshops with RAD Springfield, borrow gear from the on-site Bike Library, and engage with other sport enthusiasts! After analyzing the existing conditions of the site in the Union Station District, our team developed preliminary sketches of the park's primary features: The Skate & Bike Park and the Traffic Garden. The installation of these two features is projected to ensure the vitality and growth of cycling and micro mobility cultures in Springfield. The Traffic Garden is especially unique because it creates a safe atmosphere where new cyclists could easily learn the rules of the road and become comfortable with basic riding techniques prior to transitioning to street biking.

The benefits of outdoor recreation spaces in cities.

























A vibrant micro mobility scene seems to support a community's economic development by empowering users to socialize in designated spaces, actively travel via bike lanes and greenways, and explore their local amenities! The liveliness of a City is contingent on the energy radiating from its source of active recreation. RADSpringfield is the voice of the City's youth, and this park offers so much more than a permanent gathering location, especially since there are no parks with skate infrastructure within Springfield's boundaries.

## **Seasonality**

This timeline demonstrates that the micro mobility culture exists in all seasons. By hosting competitions and gear demos at the skate and bike park, offering cycling lessons at the model traffic garden, and holding workshops at the Bike Library, the new park will remain active all year long!



Kyle enjoys rollerblading with his friends from school.



Youth Programs

Kamryn supports the biking community by organizing gear



Malik and Blaine partner with local groups and organize meetups for wheel enthusiasts.

# Winter

# Spring

Year-Round RAD Springfield Group Rides, Meet-Ups, & Challenges

Lessons with Bike Library Staff & RAD Springfield Year-Round Workshops Related to Bike Safety, Maintenance, Repair, Storage, & Upgrade

Competitions 5 

# Summer

Gear Demos Brewery Festivals

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**Bike Library** 

Skate & Bike Park

Nat'l Bike Month Celebrations

Light Up Lyman: Night Rides

Fundraising Events for Bike Infrastructure

Autumn

Gear Demos

# Lyman St.

#### **PHASE ONE**

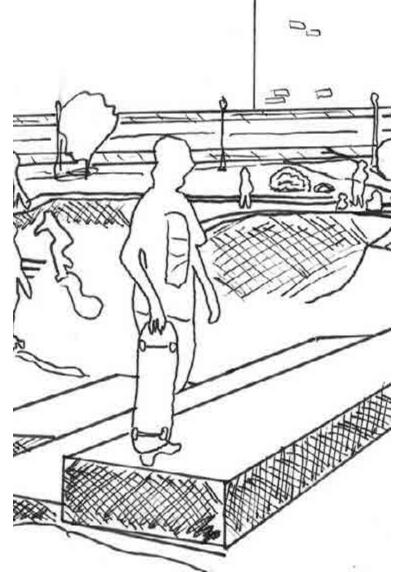


Phase I focuses on the introduction of mixed-use and residential development along Taylor Street. RADSpringfield is relocated to the park's on-side community building and Bike Library. Smaller-scale residential complexes are built next to the historic Willys-Overland along Worthington Street. At this stage, the park only includes the traffic garden's layout that is defined by paint and the skateboarding bowl with temporary ramps. These primitive elements will spark interest community-wide!

Phase II continues with a full-housing development toward the end of Taylor Street. This development contains mixed-use commercial space on its first floor. Aside from the installation of more mixed-



Phase II continues with a full-housing development toward the end of Taylor Street. This development contains mixed-use commercial space on its first floor. Aside from the installation of more mixed-use, residential spaces, a strictly commercial building is developed on Worthington Street. Chestnut and Dwight Streets transform into 2-way roadways, and bike lanes are installed on Worthington and Chestnut Streets. Another proponent of this phase is the installation of a bike lane and bump outs along Lyman Street. The end of Phase II represents the completion of the bike and skateboard park with its fully equipped traffic garden, skateboard bowl and features, and bridge. The RADSpringfield/Bike Library space begins to implement programing and services to the park's users.





At the end of Phase III, the park is surrounded by residential and mixed commercial-residential development and transforms truly into a hub for the greater Springfield community and its cycling groups. This planning and design concept, focused on catalyzing micro mobility, is sure to connect-the-city and spark a greater sense of community!



Connect The City Master Plan

While Valley Bike Share logged about 200,000 miles within the past relax and reflect on their progress at the Bike Library just steps away. year and the City has installed miles of bike lanes downtown, the extension of these bike networks is recommended. Secondly, the devel- park spectators and passive users. Also, the bridge adds additional opment of the Bike Library and RAD Springfield community space is layers to the park's dimension and emerges as the ideal location for crucial in order to energize Springfield and diversify its transportation viewing competitions, events, and programs. options. Following a fun day of learning and riding, users could relax

**Proposed Lyman Street Section** 



**Proposed Chestnut Street Section** 





A look into the Traffic Garden where kids and new wheel-fanatics can learn about bike and street safety at the traffic garden, equipped with realistic stop signs, traffic lights, and designated bike lanes.

# Connect The City: Catalyzing Cycling Culture in Springfield





Following a fun day of learning and riding, users could relax and reflect on their progress at the Bike Library just steps away. The bridge adds additional layers to the park's dimension and emerges as the ideal location for viewing competitions, events, and programs.



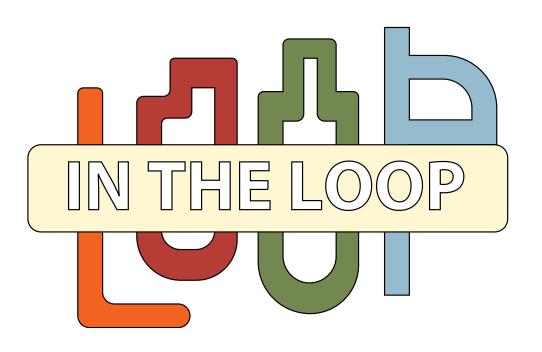
**Connect The City Competition Board** 

Connect-The-City seeks to designate a park tailored to the collaborated vision of Springfield's cycling and skating communities.



Jiaqi Guo Bryce Lloyd-Hahn Chris Ramage

In The Loop



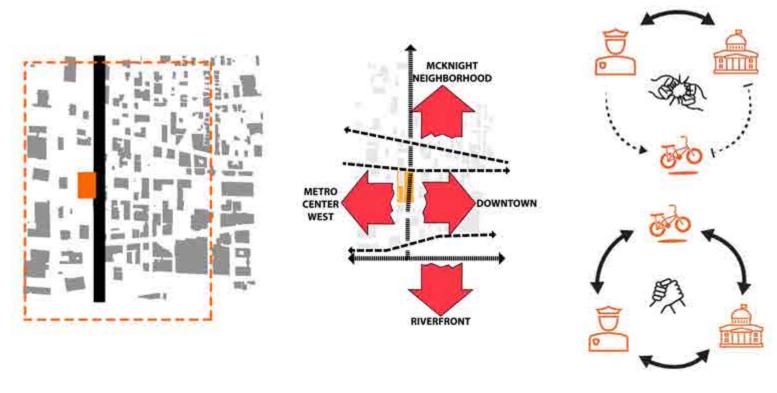
"In The Loop advances transportation equity in Springfield by stacking tactical interventions, cultural events, and long-term housing initiatives."

Winner MassINC 2020 Transformative Transit-Oriented Development (TTOD) Planning and Design Competition

HENDEE BIKEWAY CONNECTOR Springfield Tech. Community College The Quadrangle Museum Core 413 Wheels Park Paramount Theater Union Station MassMutual Center Connecticut River Walk and Bikeway Springfield Armory National Historic Park Emily Bill Park MGM Casino Future Grocery

CONNECTING NEIGHBORHOODS - RESOURCES IN THE LOOP

## In The Loop

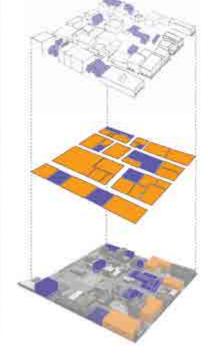




Springfield, the central Gateway City into New England, is poised to posing phased tactical and catalytic programs. In this way, Springfield become the cultural hub for greater western Massachusetts. Adjacan increase density and connecting the urban fabric, gaining trust in cent to the brand new Union Station, the site is located just west of its communities, and welcoming people to the downtown and Union downtown and is only a five minute walk from the Connecticut River Station. The loops to become active spaces, it is essential to gain local Walk and Bikeway. However, as a place that enjoys such a privileged support and let residents decide what they want. In the Loop partgeographic location, the site lacks density due to the natural gas ex- ners with RAD Springfield to empower the bike youth community and plosion that compromised numerous buildings within the area. The promote cycling as a feasible transit modality. Tactical cultural events elevated rail platform also places a physical barrier, dividing the site activate space in the into two parts. This project aims at increasing the

two main aspects: Enhancing regional and local connections& pro- local density through short term, while long-term housing initiatives





#### **BUILDING COMMUNITY HOUSING - HOME IN THE LOOP**

aim to stitch together the urban fabric in a way that increases ownership and spreads the benefit of development. An important facet to implementing these loops is to connect the existing community to the systems of ownership within these networks. Partnering with non-profit agencies like Way Finders and other local housing initiatives, the city will empower traditionally marginalized populations to benefit from investments in the city through a mixture of private and public development. Increasing both population density and ownership is a vital step towards creating successful, vibrant, and active streets.

Housing Type	Number of Units	Percent of Total

Apartments/ Lofts	1,369	60.8%
Condos/ Co-ops	76	3.4%
Townhouses/ Live-work	264	11.7%
Houses	541	24.0%
Total	2,250	100.0%

Source: Zimmerman/Volk Associates, Inc. 2019

## Loops

The loop enables everyone to walk, bike and take buses around the City of Springfield, increasing accessibility and connectivity of the site. The regional loops connect people to the many undiscovered downtown assets, while the proposed Hendee Bike Path unites the larger metro area and increases access to Union Station, the downtown district and the riverfront parks.

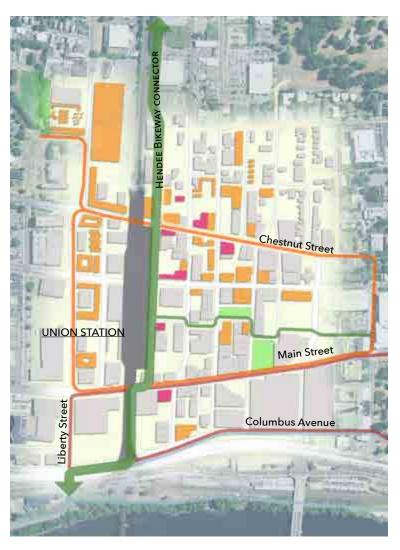
By stacking cultural events, tactical interventions, and long-term housing initiatives, Springfield grows into a diverse, equitable, and connected gateway to Massachusetts and greater New England. The recently renovated Union Station is reinforced as nexus for Transformative Transit-Oriented Development, catalyzing the formation of a vibrant downtown community.

#### Partnership with Local Organization

In the meantime, communities cooperate with non-profit agencies that focus on housing initiatives and provides various housing types for marginalized groups.

#### **Tactical Programming**

Besides, tactical programming not only activate existing public spaces but also utilize the vacant lots into more possibilities



**MASTER PLAN** 



- 1. Temporary Street Closure for Bike
- 2. Modular Skate Area/ Event Space
- 3. Community Designed Bike Park
- 4. Rotating Mural Wall
- 5. Pop-up Cultural Heritage Fair

Located behind the Paramount Theatre is the 413 Wheels Park which fosters an active environment for youth in motion.

## **EMPOWERING COMMUNITY - FUN IN THE LOOP**

engage bike youth in the design process by having them construct and welcome people into Springfield's public spaces.

The new 413 Wheels Park is woven into the existing fabric of open and test wheels parks using movable ramps, cones, and paint. This space and social amenities already thriving in the city. It celebrates will immediately activate the space, which is later transformed into the youth in motion, located in an empty lot behind the soon to be a permanent wheels park for the bike youth through the installation renovated Paramount Theater. The site will be designed in collabo- of hardscape bike park components. This same strategy combinration with our community partner RAD Springfield, the 413 BikeLife ing immediate interventions and programming with long term increw, and members of the community. On-site design charrettes will frastructure will be deployed throughout the downtown to activate

# **PHASING** SUPERMARKET **EMILY BURR PARK SPUR CREATIVE COMMONS CHESTNUT COMPLETE STREET UNION STATION GREENWAY HENDEE CONNECTOR**

#### **PHASE ONE - DOWNTOWN CORE**

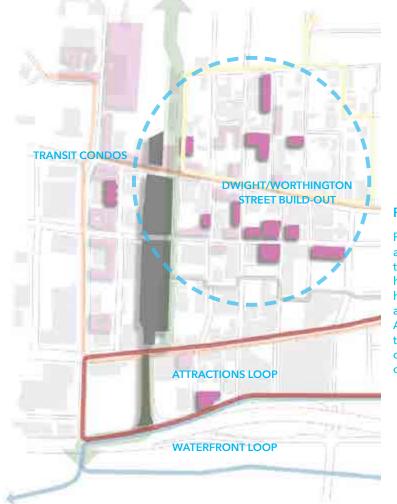
PHASE TWO - REGIONAL CONNECTIONS

#### **Phase One**

In Phase 1, we change Chestnut Street and Dwight Street to two way streets. Storefront takeovers reactivate the chestnut street corridor and are combined with new housing infill. Tactical urbanism strategies, connecting union station, Stern square, and the mass mutual center enacts the Union Station Greenway.

#### Phase Two

Phase 2 establishes the regional connection, Hendee Connector. Named after Georgy M. Hendee, a local bike & Motorcycle manufacturer. The connection links the site with downtown Springfield and surrounding neighborhoods. Emily Bill Node is addressed too, where the new supermarket will be introduced next to Emily Bill park and proposed residential buildings.



#### **PHASE THREE - FINAL INFILL**

#### Phase Three

Phase 3 finalized downtown infill and loops of interests. In phase three, through the community housing program, the site won't have the emptiness feeling but a friendly, intimate community. Also, advanced loops of connection will be formed at this stage, connecting water-front, the City of Springfield and further.





The section perspective shows the Hendee Greenway at Keynor Street. This beautiful plaza will embrace people arriving and departing from Union Station. Above, we find ourselves on Main Street with the reopened Paramount Theatre to the left. Along with improved street design, this section also illustrates redesigned bus stops, and traffic calming strategies along with new bike lanes.



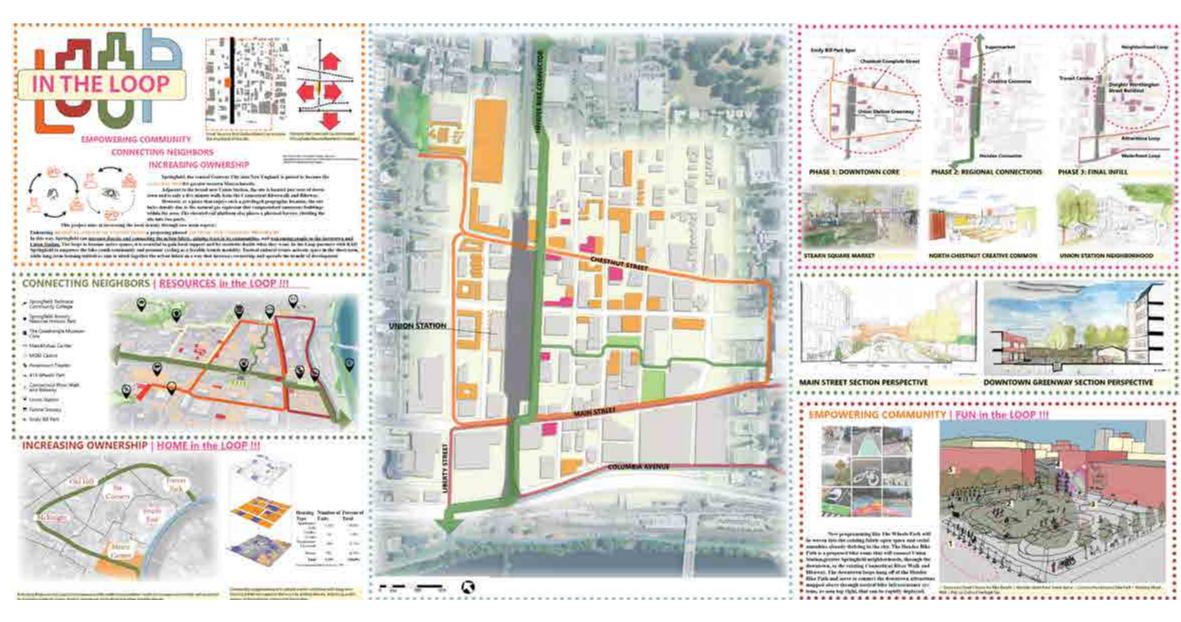




Stearn's Square Market

L-Top.
A snapshot of the Union Station approach and neighborhood.

L-Bottom North Chestnut Creative Common



#### In The Loop Competition Board

In the Loop advances transportation equity in Springfield by stacking tactical interventions, cultural events, and long-term housing initiatives.

On Monday, April 27, 2020, MassINC's Gateway Cities Innovation Institute announced the 2020 Transformative Transit-Oriented Development (TTOD) Planning and Design Competition's winning team, In The Loop.