

Dotte Agency

<http://www.dotteagency.org>

Dotte Agency (*Fig. 01*) is a University of Kansas-led design hub that fosters inter-professional collaboration amongst students and faculty (*Fig. 02*) of architecture, design, business, behavioral science, public health, and pharmacy. Together with community partners we do this (*Figs. 2a—2c*) in order to improve food access and physical activity in the underserved, urban core community in the Unified Government of Wyandotte County/Kansas City, Kansas. This approach has allowed us to test ways in which we re-imagine how universities and communities can work together as partners (*Fig. 03*) and help

to train students and faculty willing and able to emerge from silos in order to tackle wicked problems in the built environment. (*Fig. 04*) From targeted improvements to civic infrastructure (parks, streets, bikeways, sidewalks); to the development of various programs (walking clubs, bike events, park events); to data visualization through mapping to make problems and opportunities evident; to designing buildings that support healthy community activities and affordable housing; to physical prototyping of elements (benches, bike racks, signs)--we use design to proactively make the case for an improved public realm.



Fig. 02 | Architecture and Public Health students and faculty work on research project at Dotte Agency.



Fig. 03 | End of semester gathering at Dotte Agency shares the research and student work from the past semester.

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Fig. 2a | Professor Nils Gore, co-founder of Dotte Agency



Fig. 2b | Associate Professor Shannon Criss, co-founder of Dotte Agency



Fig. 2c | Matt Kleinmann, PhD candidate and co-founder of Dotte Agency



Figs. 03 & 04

Background

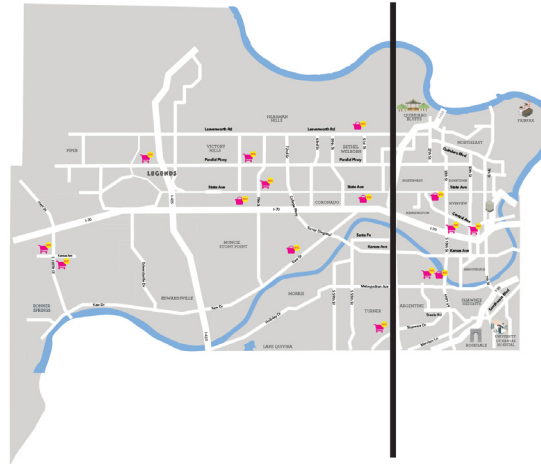
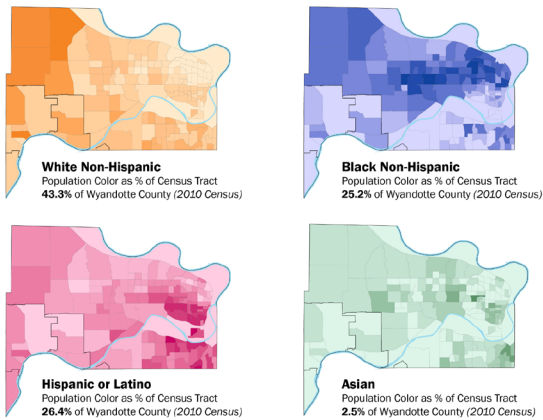
Wyandotte County, Kansas is home to one of the most racially diverse counties in the country. (Fig. 05) According to the Robert Wood Johnson Foundation's County Health Rankings, Wyandotte County ranks last among counties in Kansas for both health behaviors and for social and economic factors of health¹. Dotte Agency focuses on developing projects with a historic

minority neighborhood (largely made up of Hispanic, African American, and Refugee citizens) with over 85,000 residents, (Fig. 06) half of the county's population that ranks 101 out of 101 Kansas counties in health outcomes. It has been found that those living on the east side of the county, the underserved urban core, can expect an average life expectancy of 61 years, while

¹University of Wisconsin Population Health Institute. County Health Rankings 2012. Accessible at www.countyhealthrankings.org.

Who is affected?

Demographics



West of
Interstate 635

Total
Population: **80k**

WIC Grocery
Stores: **10**

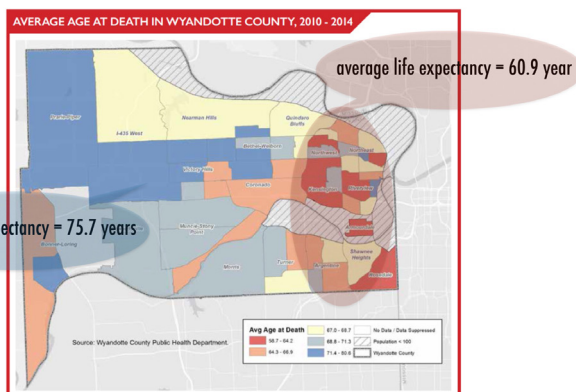
Fig. 06 | Interstate 635 is a key dividing line in Wyandotte County where approximately 84,000 people live in the east portion, where the greatest need for healthy food and access to the Women's, Infant Children program is greatest, yet the least qualified grocery stores exist.

those living in the west side, more affluent portion of the county, can expect an average life expectancy of 76 years. (Fig. 07) This is a community with limited healthcare resources, underemployment, a large number of under-utilized parks, open spaces, neglected public ways and many abandoned buildings and lots. We see many challenges in the built environment and believe that architects and designers should be 'at the table' to help build and

set policies to improve the built environment.

This recognized health ranking prompted the launch of Healthy Communities Wyandotte (HCW) in 2011. By adopting a theory of Collective Action, HCW began convening multidisciplinary stakeholders into action teams focused on key health issues: Education, Infrastructure, Nutrition, Communication, Fetal Infant Mortality, Health Services, Tobacco, and Policy. Shortly after this

Lower Life Expectancy by 16 years



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was initiated, Dotte Agency began to work as a key collaborator with the Nutrition Action Team and the Infrastructure Action Team to support community-led initiatives.

Through funding from diverse non-profits and the public health department, Dotte Agency works with interdisciplinary partners to utilize design as a tool to improve access to fresh food in food deserts and increase safe and walkable places in KCK. Over the last few years, Dotte Agency

has brought resources to these issues by connecting students and faculty (*Fig. 08*) from the University's School of Architecture, Design, and Planning; the School of Medicine; the School of Business; and the Department of Applied Behavioral Sciences. These courses are typically available to students on an ad hoc basis, relating to the changing needs of our community partners for specific resources to take on original projects.

Community Engagement

Dotte Agency adheres to principles of community engagement on a spectrum of empowerment, with *Citizen Control* on one end, and *Manipulation* on the other.² (*Fig. 09*) The goal is to first build trust within the community, (*Fig. 10*) and then seek to elevate the community's

aspirations for a higher quality of life through their participation in any intervention. In our work we strive to adhere to *National Institutes of Health's Nine Principles of Community Engagement*:

1. Be clear about the goals with the population and communities that are being engaged.
2. Know the community, including its norms, history, and experience with engagement.
3. Build trust and relationships. Get commitments from formal and informal leadership.
4. Collective self-determination is the right and the responsibility of all community members.
5. Partnering with the community is necessary to create change and improve health.
6. Recognize and respect community cultures and other factors of diversity when designing implementation approaches.
7. Sustainability results from mobilizing community assets and developing capacities and resources.
8. Be prepared to release control to the community, and be flexible enough to meet its changing needs.
9. Community collaboration requires long-term commitment.

²See Committee, C. and T. S. A. (CTSA) C. C. E. K. F. (2011). Principles of Community Engagement. NIH Publication No. 11-7782; and Arnstein, S. R. (1969) "A Ladder Of Citizen Participation," *Journal of the American Institute of Planners*, 35(4), 216-224.

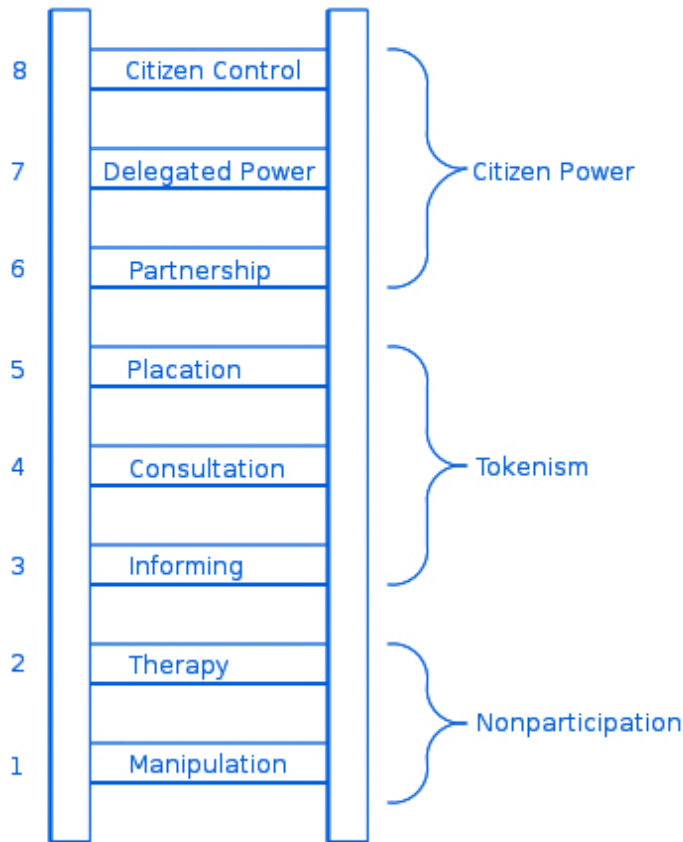


Fig. 09 | Sherry Arnstein’s “A Ladder of Citizen Participation” illustrates various levels of principles of community engagement.

Fig. 10 | Students prepare a barbecue with local residents at the Bethany Neighborhood Splitlog Farm community garden.

Engagement Tools

We have developed a series of engagement tools and strategies for building citizen participation. From pop-up panels, that allow us to take presentations on the road (or in the field); (*Fig. 11*) to a modified airstream trailer (*Fig. 12*) for mobile exhibitions and events; to a donated storefront³ (*Fig. 13*) for physical presence in the community, all of these tools allow us to make connections

where the people are and where we can draw them in. We have learned that you have to place yourself where the people are and find ways to understand their perspectives. This doesn’t happen staying in the ‘ivory tower.’ This approach to design attempts to actively involve a variety of stakeholders in the design process to help ensure the result meets their needs and is usable.

³The Community Housing of Wyandotte County generously has supported us by providing a rent-free under-utilized storefront space to operate out of and for like-minded partners to use on a regular basis. With a location just one block east of City Hall, it has ready accessibility for our partners from the Health Department and downtown business partners to convene in.

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Fig. 11 | PopUp panels exhibit students' ideas in the Levee Trail area to community partners.



Fig. 12 | Community partners provide input and feedback on the exhibited research and design proposals under the moCOLAB awning at Splitlog Farm.



Fig. 13 | The Clinton Foundation is hosted at the Dotte Agency to discuss possible directions for community partners.

Spatial Agency through Evidence-Based Design

Rather than simply mimicking the common pro bono model for design, Dotte Agency is seeking to develop a sense of 'spatial agency' (*Fig. 14*) within its students, where their skills and capacities can be used to co-develop systems that are healthy and equitable. (*Fig. 15*) From the initial phases of ideation and research to the development of new prototypes and policies, design thinking skills can afford interprofessional teams innovative new ways to address the public health issues of today and for tomorrow.

"Acting for and on behalf of others, spatial agency necessarily provides a planning process that is equal and open to anyone. But to achieve this we need a twofold shift, not just on the side of the architectural profession but also in those who commission architecture: on the one hand an explicit call for architects to face up to their political and ethical responsibility, on the other hand a call for all those involved in the production of the built environment to engage with the precepts of spatial agency." - Jeremy Till⁴ (*Fig. 16*)

⁴Schneider, T., & Till, J. (2009). Beyond Discourse: Notes on Spatial Agency. *Footprint*, (4), 97-111.

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We strive to make decisions about the what, how and where of our work based on rigorous analysis of demographics and geospatial relationships. By making data

visual (*Fig 17*) we allow analysis to speak for itself in conversations with students, citizens and policy-makers.



Fig. 14 | Dotte Agency: ‘Dotte’ = Wyandotte County and we attempt to develop ‘spatial agency’ for our community partners.



Figs. 15 & 16

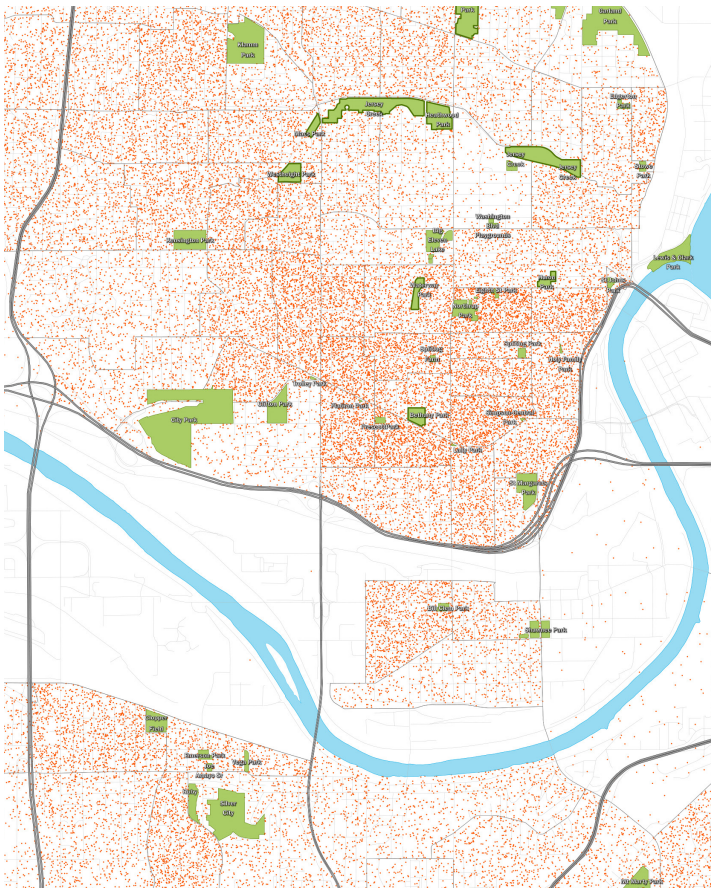


Fig. 17 | Map illustrates location of parks and population density. These types of graphics make issues easily legible with community partners, which helps guide where efforts should be made to help the greatest number of people.



Fig. 18 | Preliminary visualizations help students communicate ideas to each other and community partners. The design and prototyping of this exercise element was supported by the REACH Foundation program.

Prototyping

Our M.Arch curriculum has a required “materials and tectonics” studio built into it. (*Figs. 18 & 19*) This requires some level of investigation in a project with real materials at actual size—the phase from ideation to testing capacity of materials to bend to the will of the design idea is extremely valuable learning experience. And this leads to design-build projects in some of those studios. At Dotte Agency we use the materials and tectonics studio to develop physical prototypes that can be tested in community (*Fig. 20*) and sometimes installed for longer term evaluation in the environment. (*Fig. 21*) The trust we have built with our community partners has allowed us access to foundation support to develop projects that we might not

otherwise. Our students are able to develop their abilities to work with others, communicate and listen to community stakeholders and adapt materials to restraints of the materials, restraints of community and funder policies. For the community partners, these “small bet”⁵ projects build relationships and provide something tangible to share, be proud of and use to improve their built environment, and they aren’t such a large investment. They prototype an idea and if partners feel that they are risky, they can be removed at some point. But, if they work as planned, are maintained and add value to a place, it is a small investment that yields a high return.

Fig. 19 | Emily Davidson and Eric Stockler, students in Nils Gore’s design studio, prototype an exercise element.



Fig. 20 | Community partners explore the prototypes at a community engagement event at Jersey Creek Park.



⁵This idea of ‘Bet Small’ comes from John Bielenberg’s Think Wrong book, “take an idea public, to test it in the marketplace..”