February 1, 2019
12 - 2 pm
The Idea Foundry
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why
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Kyle Ezell is a professor of practice in city and regional planning at the Knowlton School, where he has taught since 2005. Ezell has 25 years of experience as a practicing city planner. His work at the school involves students heavily in experiential
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six feelings framework

FEEL CONNECTED
The public realm is easily reached, entered, and leads to destinations.

FEEL FREE
The public realm offers relative autonomy and the desired spectrum of independence.

FEEL CLEAR
The public realm makes sense and is not confusing.

FEEL PRIVATE
The public realm offer boundaries and provides retreat.

FEEL SAFE
The public realm diminishes the risk of being injured.

FEEL CALM
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B. STREETS

(Feeling safe, feeling clear, feeling free, feeling connected)

FROM THE RESEARCH

Many adults with autism have concerns about accessibility. Urban street design directly impacts their ability to move around. Multi-modal street design on campuses can increase accessibility and safety, especially those who are unable or unwilling to drive. The research shows that narrower travel lanes typically lead to slower traveling speeds which in turn lowers pedestrian anxiety. Suggested design includes separated bike lanes and (soft) glow-in-the-dark green paint which will increase visibility, and landscaped buffers to satisfy the Six Feelings Framework that resulted from the research.

GUIDELINES

Streets shall be multi-modal. Drive lanes shall be 10’ wide. Streets shall include a 5’0” (minimum width) bike lanes traveling in each direction separated by a 2’0”-3’0” wide buffer. Bike lanes shall be painted green using (soft) glow-in-the-dark paint.

H. LIGHTS

(Feeling safe, feeling calm)

FROM THE RESEARCH

Flash, flickering, and excessively bright lights impact the wellbeing of many adults with autism. The research suggested that purple, blue, or yellow colors are calming for adults with autism. LED or incandescent light bulbs eliminate the flickering or buzzing affect that fluorescent lights possess and provides a more comfortable environment. 1000 lumens are necessary to have full coverage of light throughout the entire outdoor plane.
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how
Gala Korniyenko is a PhD student in the city and regional planning at The Ohio State University. She was a Fulbright Scholar at the University of Kansas where she holds a Master of Urban Planning. Gala is also an administrator of the American Planning Association’s Planning for Underserved Populations Interest Group and a member of World ENABLED, an educational nonprofit organization that promotes the rights and dignities of persons with disabilities.

(http://worldenabled.org/tag/gala-korniyenko/)
TRAINING IN HUMAN SUBJECT RESEARCH

TERM-LONG LITERATURE REVIEW

EXPERT LECTURES

FOCUS GROUP DESIGN

FOCUS GROUPS FACILITATION

QUALITATIVE DATA CODING

POLICY+ INFRASTRUCTURE+ PROGRAMS IDENTIFICATION

CHARRETTE DESIGN AND FACILITATION
A Appendix

1. RESEARCH PROTOCOL

1. Objectives

People with autism have particular needs that most professionals (such as city planners who plan and design communities) have not yet considered, even as autism has become increasingly prevalent in our society. Autism Spectrum Disorder (ASD) affects millions in the United States, including families and friends of people with ASD. Community planners can learn to improve the lives of people with autism by first understanding Autism Spectrum Disorder and why education about ASD is needed to properly serve their needs. This research seeks to broaden required public participation to understand the needs of adults with high functioning Autism Spectrum Disorder. Our research fills a gap between community building and urban design and the rich literature and research found in public health (especially mental health), psychology, and special education.

This research seeks to discover how and what kinds of new planning ideas and tools can create quality living environments for adults with autism.

Beyond existing literature, this research will employ focus groups. Focus group questions for individuals with high-functioning ASD may refer to high-functioning ASD as "autism" from this point forward. The understanding that the research is focused on meeting the needs of high-functioning adults with autism will determine what kind of community they want to live in and how planners can help them thrive in the public realm. The research will also include a design charrette to help discover design solutions appropriate for adults with autism. Beyond the focus group study, we will examine existing planning tools such as zoning codes, methods such as design guidelines, and civic (and private) infrastructure that might better serve adults with autism.

Our main research question is how adults with autism can inform planners about the issue of inclusive built environments.
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focus group slides
5. FOCUS GROUP DATA ASSESSMENT

TRANSPORTATION

Driver's License:
- 2 participants have the license

Driving Experience:
- "Moving away" means being driven with no restrictions.
- "Parking on campus is a "nightmare"
- One participant was too nervous to learn at 16 years old

Would you like to drive in the future?
- If people say "yes" they would like to drive in the future

Who drives you?
- Most frequent answer was parents, family or friends (producers not documented yet)
- Community appears fully under "service providers" per questionnaire (transparency but unsure that’s true)
- "They are unaesthetic providers"
- "Parents are not doing"
- "They need a personalized"

Obstacles to getting a driver’s license:
- Fear of becoming a statistic
- Abnormalities
- Fear of driving in an accident
- "They need to be present" (at the time from parents, however)
- "Driver’s instructor prevented me to the focus group from hiring someone while they were driving"
- "Real-life"

Obstacles to getting a driver’s license continued:
- "Night / visual impairment"
- Can be resolved as a refractive error, but potentially obstacles stems from video games (or other entertainment)
- "Crashing with a vehicle (especially contact a case)"
- "The reasoning / feedback is not good at the job"
- "Another crash, but an actual crash"
- "Turning the car"
- "Feet to general"
- "They can’t respond"
- "The amount of time and having an examination is given"
- "Lack of actual practice on actual (2)"
- "Concern (any of them)"
- "Focusing on the lights for the car and what’s happening on the car’s dashboard"
- "Another visual impairment"
- "no incentives to drive, no benefit"
- "Real schedule, certified time to practice"
27 charrette project ideas (samples)
where when
(Research design:)

(MULTI-USE TRAILS)

DESIGN

Researchers built a simplified version of the Multi-Use Trail mentioned in the guidelines. Under the Knowlton Hall overhang, a to-scale mock-up of the trail was constructed using magenta duct tape. The tape was used to denote the separate lanes, while white chalk was used to draw arrows and other wayfinding.

(Testing of design:)

(Revised “tested” design^)
Testing design on the OSU campus with adults with autism
When Every Day Is a Sensory Overload

Learning to plan with people with autism, not for them.

By Kyle Ezell, AICP; Gala Kornienko, AICP; and Rick Stein, AICP

Public Transit:
Riding the bus can be stressful. It’s dark and sound-deadening. It can cause anxiety and make it hard for people with autism to concentrate. The waiting area may be noisy and poorly lit. The bus schedule can be confusing. It can increase stress.

Street Crossings:
Pedestrians often cross the street too quickly. It can cause anxiety and make it hard for people with autism to concentrate. The crossing area may be noisy and poorly lit. The crossing signal can be confusing. It can increase stress.

Crowded Spaces:
Adults with autism often have difficulty with multiple stimuli. They can be overwhelmed by stimuli such as noise, light, or other people. It can cause anxiety and make it hard for people with autism to concentrate. The crossing area may be noisy and poorly lit. The crossing signal can be confusing. It can increase stress.

APA
American Planning Association
Making Great Communities Happen

PAS Memo

Autism Planning and Design Guidelines 1.0

By Kyle Ezell, AICP; Gala Kornienko, AICP; and Rick Stein, AICP
Envisioning the Future of Human-Technology Partnerships Conference

Autism, Innovation & the Workforce: Envisioning the Future of Human-Technology Partnerships

November 29, 2018
Vanderbilt University - Nashville, Tennessee

Supported in part by the National Science Foundation’s Human-Technology Frontiers program
Typical Barriers: Airline Ops

- Gate Changes
- Long Walks
- Sensory Overload

PANELISTS

Peter Slatin
Slatin Group

Wesley Major
Purdue University

Gala Korniyenko
The Ohio State University
The Association of Collegiate Schools of Planning Conference in Buffalo, NY
Look for us at the San Francisco National Conference

Autism Planning and Design Guidelines 1.0

Saturday, April 13, 2019 from 10:45 a.m. - noon PDT

CM | 1.25
Activity Type: Educational Sessions
Activity ID: NPC198009

Looking for sessions relating to inclusiveness and social justice? You’ve found one! This session has been identified and peer-reviewed as significantly pertaining to inclusiveness and social justice. View all inclusiveness/social justice-related activities.

Session Speakers

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