

Designers Lighting Forum

Light + Justice in Practice
Strategies & Case Studies

Edward Bartholomew & Lya Shaffer Osborn
(LightJustice.org)

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Credit(s) earned on completion of this course will be reported to **AIA CES** for AIA members. Certificates of Completion for both AIA members and non-AIA members are available upon request.

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Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



Light + Justice

Everyone deserves good lighting and beneficial darkness

Light Justice is the practice of planning, designing, implementing, and investing in lighting for historically neglected communities through a process of stakeholder respect and engagement.

Light + Justice

Everyone deserves good lighting and beneficial darkness



What is Light Justice?

Thoughtfully designed and regularly maintained lighting is too often a signifier of prosperity. Under-resourced communities frequently endure inappropriate and even oppressive lighting, which in turn is detrimental to their well-being.

Curators:

Edward Bartholomew, Mark Loeffler, Lya Shaffer Osborn & Richard Muthuma

The lighting industry has both the obligation and opportunity to improve the visual experience of communities which historically have not been afforded adequate lighting attention and technology. Recognition of this responsibility, and curiosity around how lighting can contribute to greater social and environmental equity, is where light justice begins.

Everyone deserves good lighting and beneficial darkness.



Learning Objectives

At the end of this course, participants will be able to:

1. Recognize the impact of unjust lighting practices on vulnerable occupants
2. Learn various methods for addressing lighting inequities in their projects through case studies
3. Address the mechanisms that contribute to lighting injustice and offer strategies to "redesign" projects which create a more just visual environment
4. Examine current lighting practices and awards in order to deepen current lighting conversations and design equitable quality lighting for all



What is “good”
lighting?

Human-centric? Occupant empowering!



A woman with dark hair styled in braids, wearing a red long-sleeved top with a floral pattern, stands with her back to the camera. Her arms are outstretched to the sides. She is wearing a large hoop earring. The background shows a modern building with large windows and greenery under a clear blue sky.

**Sustainable Lighting is both Environmentally
and Socially Just**

Vulnerable Communities



- Low status with no civic power
- Non-professional, low education
- Little or no political representation
- Lack of prioritization over roads and infrastructure
- Immigrant
- Non-English speaking
- Lower income
- Black, Latino, Asian populations

Breanna Taylor Nighttime Protest
Seattle, WA. 2020

What is unjust exterior lighting?

- Hyper-surveillance
- Nocturnal behavior modification or suppression
- Institutionalized discrimination & negligence
- Visually intrusive, and incoherent
- unshielded, glary
- Unhealthy for people and nature
- Prioritizes streets and cars
- Lighting that prevents any positive nighttime behavior such as social gatherings.
- It produces constant light trespasses into residence windows

What is unjust interior lighting?

- Limited or no access to daylight & views
- No consideration for intensity, color, or control
- Prioritizes energy efficiency & “security” over visual comfort
- Low-cost, low-bid systems with poor performance
- Unshielded, prone to glare and flicker
- Rarely or poorly maintained
- Lack of controls for the occupants
- Doesn't support the occupant or the visual task in the space



“The outputs of design justice are not only to repair for past injustices of the physical environment, but to make them fair in the present and remove barriers for the future.”

Bryan Lee Jr.
Founder/Principal; Colloqate Design

1. Engage
2. Educate
3. Empower
4. Deploy



SIGNAL STATION NORTH

Engage
Educate
Empower
Deploy

Project Type

District Lighting Plan and Public Space Engagement Initiative

Location

Central Baltimore, MD

Participants

Flux Studio (Lighting Design)
Neighborhood Design Center (Project Lead)
Central Baltimore Community Members

Approaches

1. Community gathering #1 (type, description)
2. Charette (type, description)

Outcomes

1. Public space lighting plan
2. Creative lighting installations
3. Practical community tools







Image(s): Flux Studio

THE COTTAGES AT HICKORY CROSSING

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Project Type

Multi-Family Housing

Location

Dallas, TX

Participants

buildingcommunityWORKSHOP

CitySquare Housing

Communities Foundation of Texas

Metro Dallas Homeless Alliance

Approaches

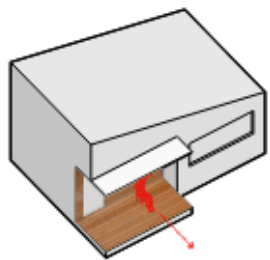
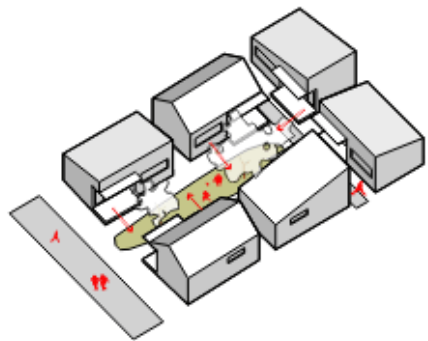
Collaboration with support service professional, and 54 unhoused individuals

Outcomes

- Cottages at Hickory Crossing provides permanent supportive housing and support services for the fifty most chronic cases of homelessness in Dallas.







social scale



community



group



individual



THE SCALE

Transitional exterior spaces enable one to navigate through varying spatial experiences, from the more secluded porch to the shared courtyard, before reaching the common green.



LITTLE VILLAGE NIGHT SKY

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Project Type:
Street Lighting/Community Lighting

Location:
Chicago, IL

Participants:
Adler Planetarium
YOLO (Organization)

Approaches:
Photovoice Documentation

Outcomes:
Doing a community led lighting inventory of the neighborhood
Negotiating with civic leaders and utilities to make lighting changes







“The light is flickering when I am doing homework. I sleep at 9 or I stay up till 10 because I'm worried about the next day's quiz. It's time to sleep. I'm ready to close my eyes and rest after a long day. When I turn my back to look outside all I see is the light flickering. On. Wait three seconds. Off. Each day, every day, each night I get so annoyed that I flip to the other side.”

- Kiki



GOWANUS LOWLANDS



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Empower
Deploy

Project Type

Community Relighting Plan

Location

Brooklyn, NY

Participants

Sighte Studio (Lighting Design)
Gowanus Community Members

Approaches

1. Light Walks
2. Public Lighting Workshops
3. Community gatherings

Outcomes

Lighting recommendations & project proposals
Ongoing community engagement



**NYCHA
CAMPUSES:**
LOWLANDS
LIGHTING
PALLETTE
CONTINUES,
CONNECTS PUBLIC
SPACE

**PERFORMANCE
AREAS:**
FLEXIBLE
LIGHTING
INFRASTRUCTURE

**OPEN SPACE/
GATHERING
AREAS:**
PEDESTRIAN
SCALE POST-TOP
LANTERNS

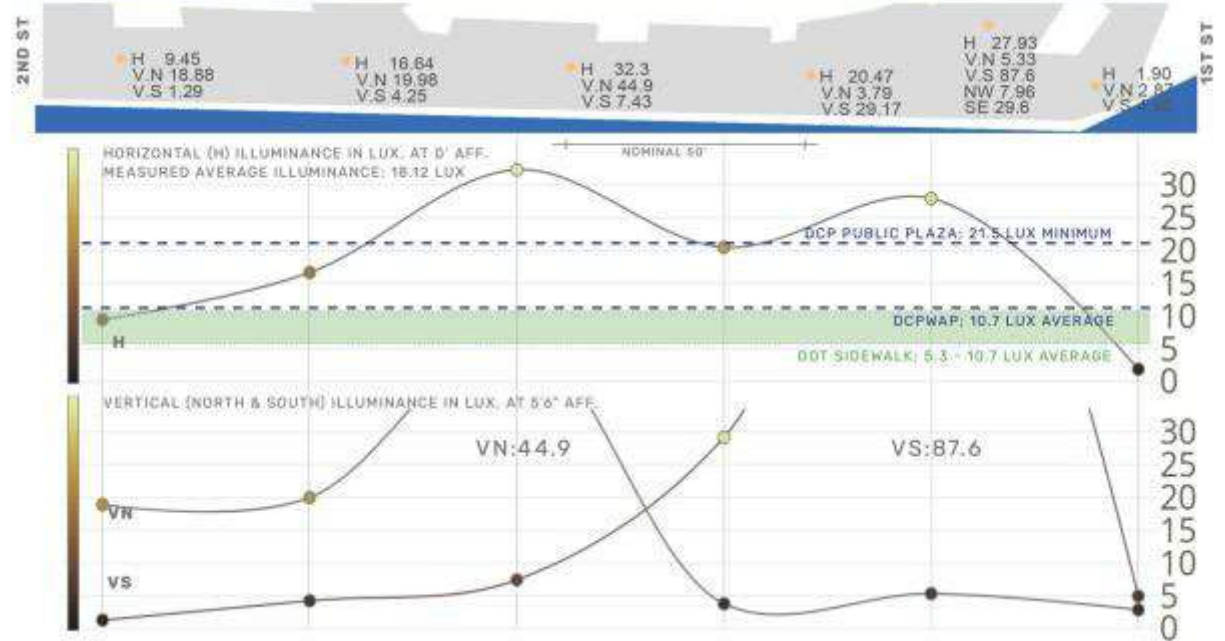
LIGHTING NODES:
SIGNAL CANAL
CROSSING AXIS

ROAD BRIDGES:
LIGHTING
CELEBRATES
INFRASTRUCTURE,
ACTS AS
WAYFINDING

**WATERFRONT
PATHWAYS:**
HIGH-MAST
SHIELDED AREA
LIGHTING

ECOLOGY:
REDUCE LIGHT
LEVELS, ALLOW
FOR DARKNESS TO
SUPPORT FLORA
AND FAUNA

S



Image(s): Sichte Studio

COMMON GROUND HIGH SCHOOL

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Empower
Deploy

Project Type

Public School Design & Build

Location

New Haven, CT

Participants

Atelier Ten (Lighting Design)
Gray Organschi (Architect)
Students and Staff

Approaches

1. Feedback gathering from students and staff
2. Community meetings

Outcomes

- Daylight and electric lighting responsive to student and staff needs



PRESTEIGNE AND NORTON

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Deploy

Project Type

Community Lighting Masterplan

Location

Towns of Presteigne & Norton, Wales

Participants

DarkSource (Lighting Design)
Local Amateur Astronomers & Dark Sky Advocates
Presteigne and Norton Town Councils
Community Members

Approaches

1. Community gatherings, town halls
2. Full-scale mockups and long windows of opportunity for feedback

Outcomes

- Full town street relighting
- Designation as first Dark Sky village in Wales, setting precedent



PUBLIC HOUSING

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Deploy

Project Type
Public Housing

Location
San Jose, CA

Participants
Sriti Singh (Lighting Design)

Approaches
Budget Advocacy

Outcomes
Met budget while providing a quality lighting solution with feedback from residence







SCIDpda CHINATOWN RELIGHTING RECOMMENDATIONS



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Deploy

Project Type

Community Relighting Plan

Location

Chinatown, Seattle, WA

Participants

SparkLab (Lighting Design)
Seattle City Light
Seattle Police Department
Chinatown District Improvement Association
Chinatown, Little Japan, Little Saigon Community Members

Approaches

Community Meetings
Light Walks

Outcomes

Lighting education materials
Lighting recommendations & guides
Ongoing projects



Municipal outages



Existing pole lights off in hazardous stairwell



Lighting turned off contributes to desirable sleeping place



Lighting from building windows influences streetscape



Bus stop shelters are prominent points of focus in the pedestrian right of way



Some bus stop shelters rely heavily on external sources, others have internal lights



Internal lights are of various types, some lighting the roof, others lighting glass patterns - all are direct view and have significant glare.

LIGHTING SHOULD ENABLE... 照明应该启用...

VISUAL ACUITY

视觉敏锐度

COMFORT

安慰

SENSE OF PLACE

地方感

Reference: Illumination Engineering Society guidelines, i.e. IES G-1-16 Guide for Security Lighting for People, Property, and Critical Infrastructure

Comments from Seattle Police Department

When thinking of lighting and safety, a few things to keep in mind are:

- Lighting helps an individual observe their surroundings and respond to potential threats.
- Pathways or pedestrian connectors should be illuminated to the point where faces of pedestrians can be observed.
- Poor lighting, whether too bright or not bright enough can diminish safety.
- Quality of lighting is as important as the amount of lighting.

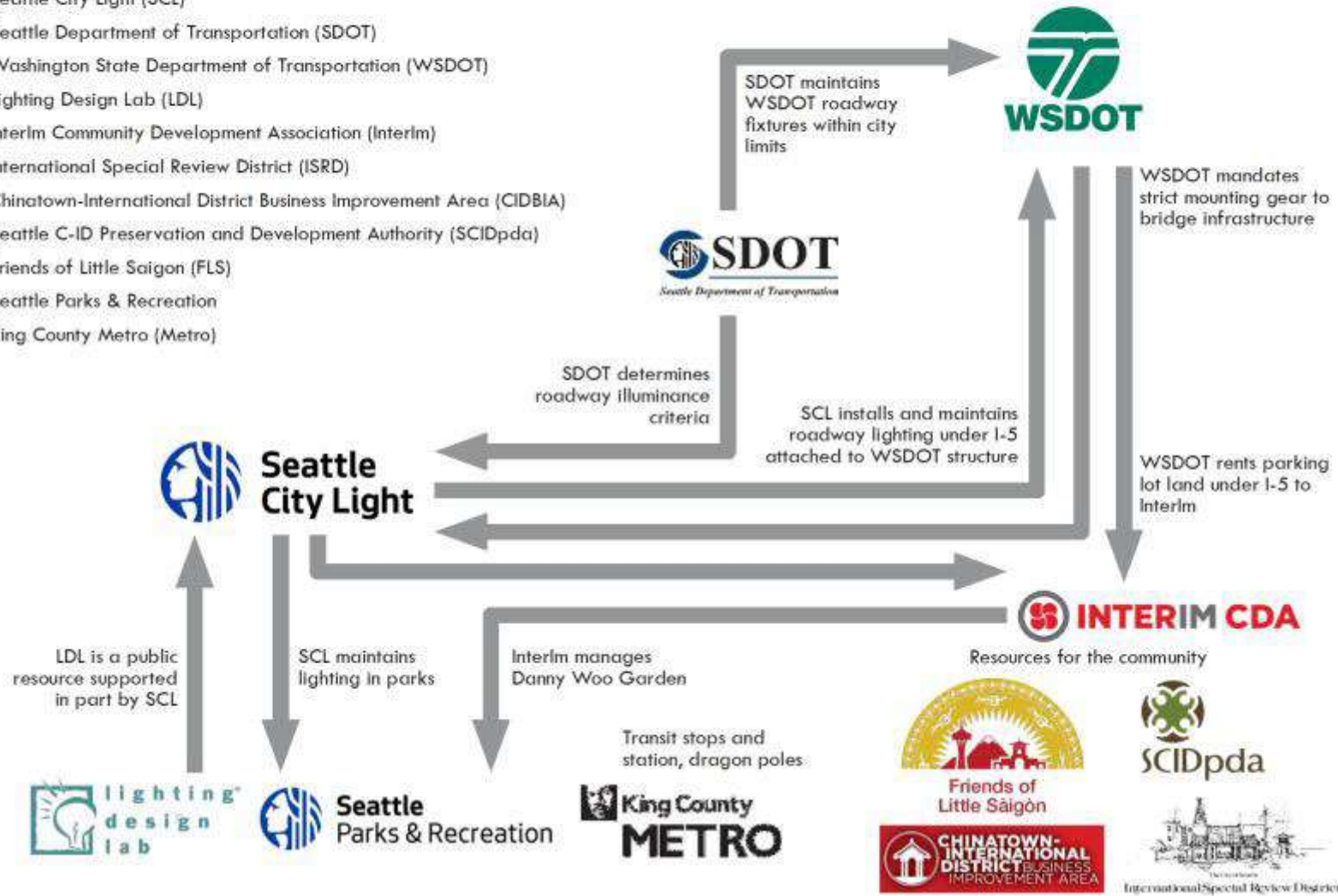
(Barb Biondo, Crime Prevention Coordinator)

07 COMMUNITY FEEDBACK

Note, this is an unofficial diagram and subject to change. There are many inter-related entities involved in the decision-making process for projects in the C-ID, and many more than are identified here.

Community Partners

- Seattle City Light (SCL)
- Seattle Department of Transportation (SDOT)
- Washington State Department of Transportation (WSDOT)
- Lighting Design Lab (LDL)
- Interlm Community Development Association (Interlm)
- International Special Review District (ISRD)
- Chinatown-International District Business Improvement Area (CIDBIA)
- Seattle C-ID Preservation and Development Authority (SCIDpda)
- Friends of Little Saigon (FLS)
- Seattle Parks & Recreation
- King County Metro (Metro)



INCARCERATED SPACES

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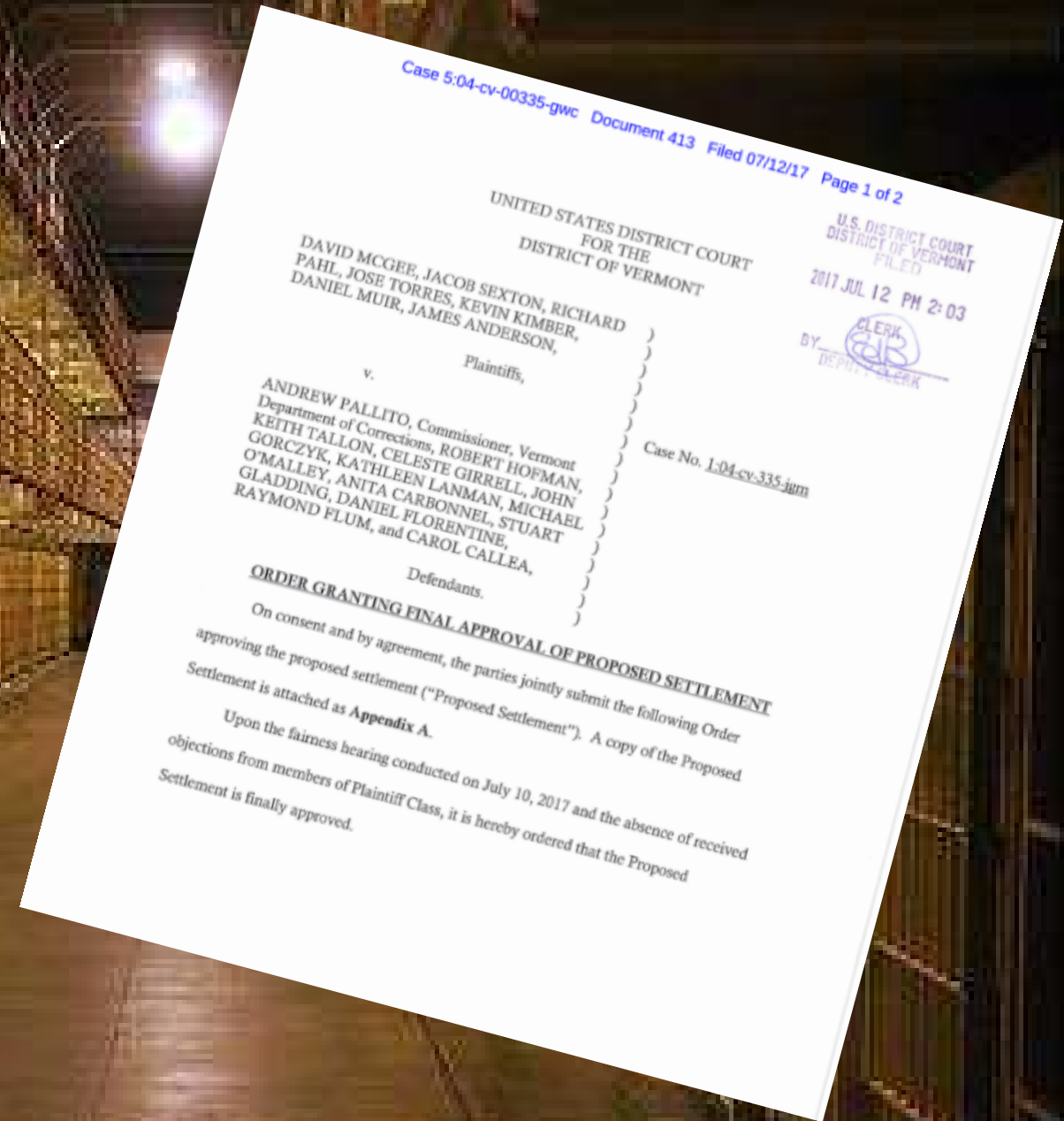
Project Type:
Incarcerated Spaces

Location
United States

Participants
Incarcerated

Approaches
Legal Arguments

Outcomes
Order Granting Final Approval (Win) in VT






[nature](#) > [nature mental health](#) > [articles](#) > [article](#)

Article | [Published: 09 October 2023](#)

Day and night light exposure are associated with psychiatric disorders: an objective light study in >85,000 people

[Angus C. Burns](#) , [Daniel P. Windred](#), [Martin K. Rutter](#), [Patrick Olivier](#), [Céline Vetter](#), [Richa Saxena](#), [Jacqueline M. Lane](#), [Andrew J. K. Phillips](#) & [Sean W. Cain](#)

[Nature Mental Health](#) (2023) | [Cite this article](#)

334 Accesses | **1136** Altmetric | [Metrics](#)



Prison of Leuze-en Hainaut, Brussels

“For nearly every injustice in this world, there’s an architecture, a plan, a design that has been built to sustain it.”

Bryan Lee Jr.
Founder/Principal; Colloqate Design

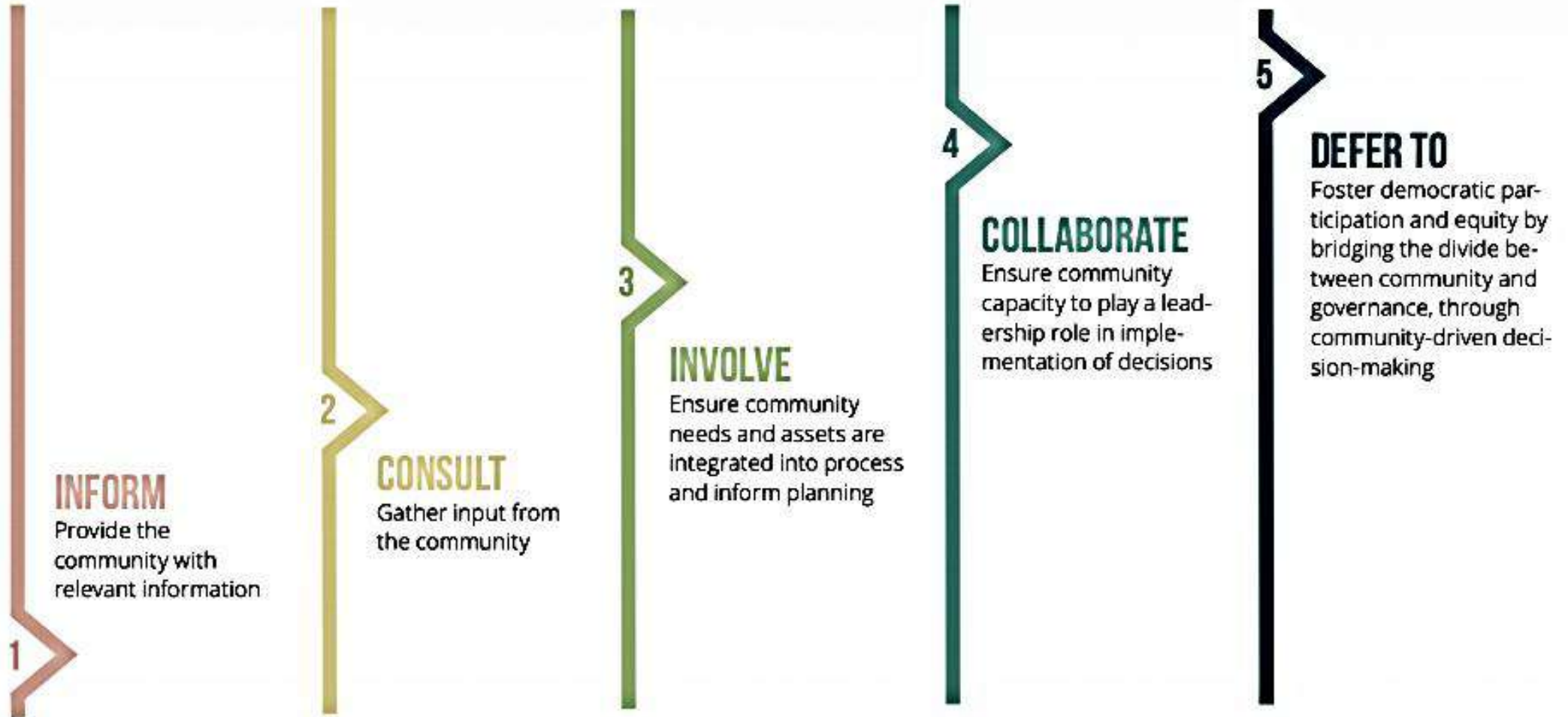


Engage



North Dallas Community Workshop
buildingcommunityWORKSHOP

NAACP Guidelines for Equitable Community Involvement in Building & Development Projects and Policies



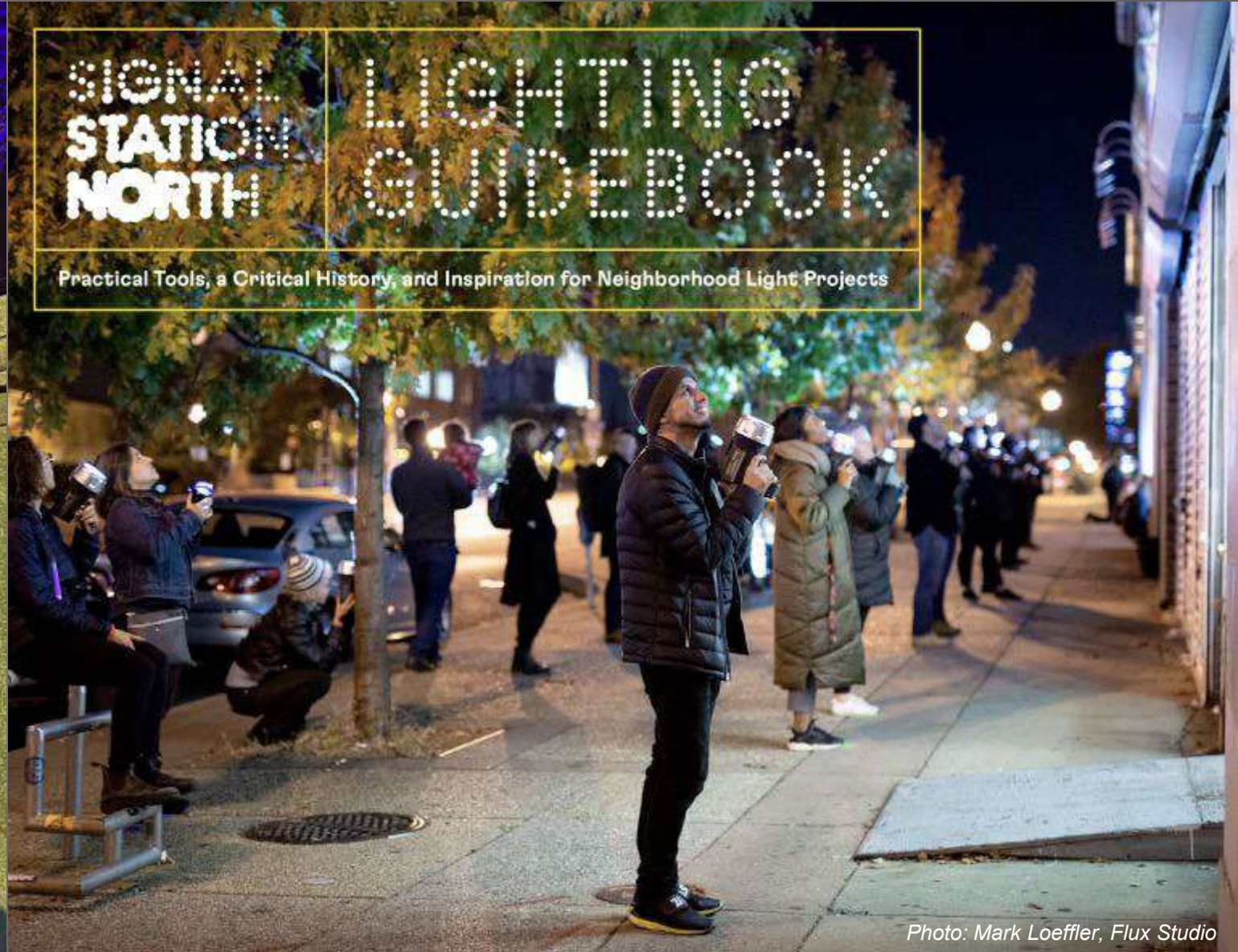
Educate



SIGNAL
STATION
NORTH

LIGHTING
GUIDEBOOK

Practical Tools, a Critical History, and Inspiration for Neighborhood Light Projects





Community Friendly Lighting Program

Photo(s): Bob Parks, Smart Outdoor Lighting Alliance

Empower





Light Follows Behavior
Whitecross Estate Lighting Workshop



Image(s): Light Follows Behavior

Deploy



BRISTOL PLYMOUTH REGIONAL TECHNICAL SCHOOL

Engage
Educate
Empower
Deploy

Project Type
School Design & Build
Pilot program to advance standards for materials transparency in public schools

Location
Taunton, MA

Participants
GGD Consulting Engineers (Electrical Engineers)
HMFH Architects (Architect)

Approaches

- Consider impact of design decisions on people and environment along the supply chain
- Educational and sustainability visioning with the community
- Workshops

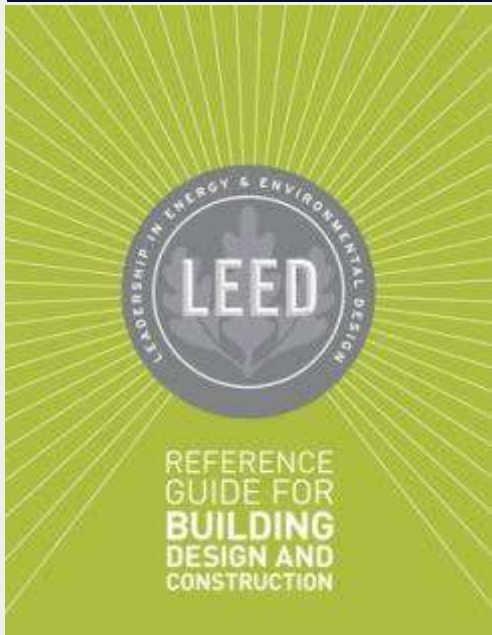
Outcomes
Materials transparency documentation created new template for all projects moving forward
MA School Building Authority updated materials policy, minimum requirements now must be met



Image(s): Alexandra Gadawski

DESIGN AS ACTIVISM

EDUCATING FOR CHANGE



Social equity within the community

Credit | 1 point

Option 1. Complete the SEED Evaluator Parts 1 and 2 to identify and address at least one critical issue in the social or economic category



Just 2.0

Just.

Organization Name: ABC Corporation
Organization Type: Service Provider
Headquarters: Seattle, Washington
Office Locations: 30
Number of Employees: 10,750

Social Justice Indicators:

Diversity & Inclusion

- Gender Diversity
- Ethnic Diversity
- Inclusion
- Engagement

Employee Benefits

- Health Care
- Retirement Provision
- Family/Medical Leave
- Training/Education

Equity

- Full-Time Employment
- Pay-Scale Equity
- Freedom of Association
- Living Wage
- Gender Pay Equity

Stewardship

- Local Communities
- Volunteering
- Animal Welfare
- Charitable Giving
- Positive Products

Employee Health

- Physical Health
- Well-Being

Purchasing & Supply Chain

- Equitable Purchasing
- Supply Chain

THE SOCIAL JUSTICE LABEL 2.0

ABC-001

EXP. 12/30/2020

INTERNATIONAL LIVING FUTURE INSTITUTE™



LIVING BUILDING CHALLENGE

Chicago Smart Lighting Program

<https://chicagosmartlighting-chicago.opendata.arcgis.com/>



CHICAGO
DEPARTMENT OF
INNOVATION &
TECHNOLOGY



CHICAGO
INFRASTRUCTURE
TRUST

www.ChicagoSmartLighting.org



Call to Action

Individual

Share knowledge as a citizen designer

Grassroots

Offer expertise; collaborate locally

Design Firms

Look for low-bid projects; find opportunities to engage, educate, and empower, impacted communities and occupants

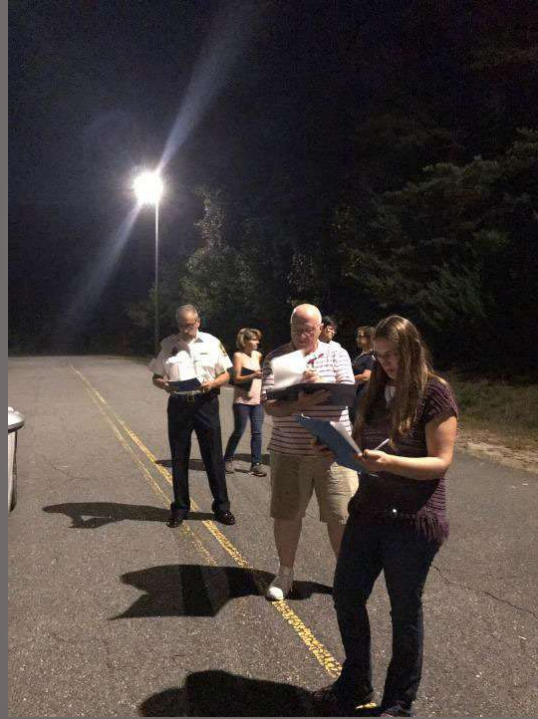
Industry

Support and celebrate equitable & just lighting projects in underserved communities

ENGAGE



EDUCATE



EMPOWER



DEPLOY



THANK YOU



APRIL 5, 2024

LIGHT + JUSTICE SYMPOSIUM

INTERIOR SPACES

THE NEW SCHOOL
PARSONS



ies.org/events

This concludes The American Institute of Architects Continuing
Education Systems Course

