Tackling Poverty through Public Interest Design

New Partners for Smart Growth Conference 2016

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CPID Methods & Practices

- Multi-Stakeholder Participation
- Integration
- Networked Interventions
CPID Methods & Practices
Multi-Stakeholder Participation

- Open, transparent, iterative design process
- Harnesses community’s social, political, and economic capital and know-how
- Involves technical knowledge of design professionals, political will of local and/or regional government, investment capacity of private sector
- Incorporate stakeholder consultation and engagement so residents, business owners, municipal groups, and other groups have true agency in decision-making process
• Combine physical, social, & economic strategies in single intervention
• Design may be the entry point, but integrated intervention expands beyond design of structures and/or landscapes to include design of programs, processes, organization structures, enterprises with help of multi-disciplinary team
• Resident needs related to development should not be oversimplified – consideration of broader social and economic needs can help avoid lopsided or tunnel vision type of development
CPID Methods & Practices

Networked Interventions

- Large scale issues (vacancy, poverty, access to food, making healthy communities) addressed by networking series of small scaled interventions
- Small interventions envisioned from start as strategic components of future network through selection, coordination, design, and development
- Network is physically, fiscally, socially, and economically supported to build new economics, social safety nets, and political capital
- Large scale efforts can disenfranchise residents, or small scale efforts can be isolated or one-off
- SOLUTION: Adopt multi-scale approach to all projects, no matter the catalyzing original scale
Research

Existing Conditions
Median Household Income
2010 Inflation Adjusted Dollars, by Block Group

Data from 2010 American Community Survey, U.S. Census Bureau / Social Explorer
Families Living Below Poverty Level
Percent by Block Group

Data from 2010 American Community Survey, U.S. Census Bureau / Social Explorer
Owner–Occupied Housing Units
Percent by Block Group

Data from 2010 American Community Survey, U.S. Census Bureau / Social Explorer
Persons Identifying as Non-Hispanic, White Alone
Percent by Block Group

Data from 2010 American Community Survey, U.S. Census Bureau / Social Explorer
Educational Attainment, Some College or More of Population 25 Years or Over, Percent by Block Group

Data from 2010 American Community Survey, U.S. Census Bureau / Social Explorer
The neighborhood of Del Paso Heights lacks convenient access to a variety of services that can significantly impact the quality of life for residents within the neighborhood, in particular those residents with lower incomes or special needs. Healthy food and affordable healthcare are just two of the services that are difficult to access from the neighborhood. What services are in the neighborhood are located around the perimeter of the neighborhood along major roads. The City of Sacramento does not have a large presence within the Del Paso Heights neighborhood with most of their services, including Family Services, Housing and Legal Aid located downtown. Assuming access to a car or an adequate public transit system, downtown Sacramento is a 14 minute drive with no traffic or a 43 minute bus trip one-way from Del Paso Heights. But even with access to transportation accessing these services can be time-consuming for residents requiring time off from work or accessible child care.
Harvest Festival
Community Engagement
Places I like...
Demographics

- **AGE**
  - 1-10: 92
  - 11-20: 55
  - 21-30: 30
  - 31-40: 41
  - 41-50: 35
  - 51-60: 11
  - 61-70: 7
  - 71+ (unknown): 1

- **GENDER**
  - Male: 245
  - Female: 272

- **ETHNICITY**
  - White: 92
  - African: 89
  - Hispanic/Latino: 156
  - Asian: 36
  - Middle Eastern: 36
  - Male: 70
  - Female: 237

272 Total Respondents
245 Total Respondents
416 Total Respondents

Things I do...

<table>
<thead>
<tr>
<th>IN DPH</th>
<th>OUT OF DPH</th>
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<tbody>
<tr>
<td>Restaurants</td>
<td>19</td>
</tr>
<tr>
<td>Grocery</td>
<td>24</td>
</tr>
<tr>
<td>Shopping</td>
<td>9</td>
</tr>
<tr>
<td>Work</td>
<td>8</td>
</tr>
<tr>
<td>Entertainment</td>
<td>14</td>
</tr>
<tr>
<td>School</td>
<td>25</td>
</tr>
<tr>
<td>Child Care</td>
<td>17</td>
</tr>
<tr>
<td>Recreation</td>
<td>17</td>
</tr>
</tbody>
</table>
Site 1: Grand Ave and Marysville Blvd

I wish this was...

Site 2: Marysville Blvd and Roanoke Ave

I wish this was...

Site 3: Rio Linda Blvd and Roanoke Ave

I wish this was...
I wish this was...

Site 1: Grand Ave and Marysville Blvd

Site 2: Marysville Blvd and Roanoke Ave

Site 3: Rio Linda Blvd and Roanoke Ave

Safe (6)
- Gym (1)
- Job Opportunity (1)
- Daycare (2)
- Free Clinic (1)
- Library (3)
- Children's Center (1)
- Medical/Hospital (1)
- Fix Schools (1)
- Community College (1)
- Free Internet (1)
- Community Center (1)
- My House Close to School (1)
- Weave Program (1)

After School Place for Kids (1)
- Arcade (3)
- Movie Theater (1)
- Chuckie Cheese (2)
- Disneyland (2)
- Waterpark (1)
- Carnival (1)
- Six Flags (1)
- Fair (1)

Shopping (1)
- Mall (2)
- Forever 21 (3)
- Claire's (2)
- Sanrio (1)
- Walmart (3)
- Candy Shop (2)
- Card Shop (1)

Parking (1)
- Coffee Shop (3)
- McDonald's (1)
- Restaurant (3)
- Bakery (1)
- Sonic (1)
- Pizzeria (2)
- Jamba Juice (1)

Park (6)
- Football/Soccer Field (7)
- Playground (8)
- Play Tag (1)
- Dog Park (2)
- Basketball Court (2)
I wish this was...

Site 1: Grand Ave and Marysville Blvd
I wish this was...

Site 2: Marysville Blvd and Roanoke Ave
I wish this was...

Site 3: Rio Linda Blvd and Roanoke Ave
I wish this was...

transportation needs 5

restaurants 12

outdoor recreation 26

shopping 25

community resources 23

entertainment 13

community resources 23
Envisioning

Del Paso Heights & South Sacramento
Del Paso Dance:
Youth Dance Center

safety
youth involvement
community space
streetscape building
Multi-Generational Center

- Educational Play
- Multi-Generational Connection
- Safety
- Meeting Ground

Program Connectivity
Open Connection
Closed Connection
Streets for People

EXISTING

PROPOSED

SCALE 1/8"

SUN SHADE OPTIONS
The Collective
Storefront for Community

vacant conditions

start of process—engagement through participation

sourcing ideas from the community

rotational programming rotational programming cont.

end of process—finding what the community will support
Oasis Bus Stop

before

1

2

3

4

5

6

7

before
The neighborhood community is the expert on what types of programs would best serve the residents and the type of design that will best reflect the neighborhood. The intent is that the community drives the development of the Oasis Stops through a series of workshops with local residents. The workshops offer the residents a voice in choosing the program of each Oasis Stop as well as the physical aesthetics of each given Oasis Stop. In addition these workshops offer potential funding and service partners an opportunity to interact with the people that they are hoping to serve.
MATERIAL EXAMPLES FOR STATIONARY BUS STOP

WOOD SLATS
PINEWOOD
METAL PANEL

MATERIAL EXAMPLES FOR CUSTOM MOVEABLE SCREEN

METAL MESH SCREENS
POLYCARBONATE
WOOD SCREENS
Community Guide to Transit Stop Design
DESIGN CHARACTERISTICS - Platform

Max number of passengers in the stop at any given time

\[ P_{\text{max}} X \left( \text{ft}^2 \text{ per passenger} \right) + A_{\text{inf}} \]

Level of service

<table>
<thead>
<tr>
<th>Level</th>
<th>ft² / p</th>
<th>User experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&gt;13</td>
<td>free standing and circulation</td>
</tr>
<tr>
<td>B</td>
<td>10-13</td>
<td>direct physical contact with others</td>
</tr>
<tr>
<td>C</td>
<td>7-10</td>
<td>extremely discomforting density</td>
</tr>
<tr>
<td>D</td>
<td>3-7</td>
<td>no possible movement</td>
</tr>
<tr>
<td>E</td>
<td>2-3</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>&lt;2</td>
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</tbody>
</table>

User experience

- Free standing and circulation
- Direct physical contact with others
- Extremely discomforting density
- No possible movement

Key factors:
- Passenger circulations
- Passenger waiting area

Platform area

Area required for stop infrastructure

Center for Public Interest Design
Scheme 1: Oasis

ELEVATIONS

South Elevation in its closed position

North Elevation in its closed position

South Elevation in its open position

North Elevation in its open position
Scheme 2: Link

Center for Public Interest Design
COMMUNITY DESIGN COMPONENT

The community design component of the LINK stop is that the entire stop is made from “low-tech” recycled materials with the idea that the construction is actually carried out by the community members in conjunction with a local artist, community organization and transit authorities. The diagram below illustrates how individuals in the community could work together to within the design parameters, design a bust stop that fits their vision and needs.

EVENING USE / SECURITY

Linear LED lighting attached to the underside of the structure will allow for safe levels of illumination while creating an aesthetically pleasing rhythm of light along the structure.
Scheme 3: *Rhythm*

 COMPONENTS

- photovoltaic panels
- steel panels
- steel structure
- plug-in furniture
- steel tube armature
- wood plank floor
TUBE CONFIGURATIONS - Examples responding to ergonomy and activities

- Each shelter unit is composed of a simple structure opened in each direction to ensure easy circulation. A directable overhead panel provides shade during the day and an integrated photovoltaic system charges the LED illumination. The materials are easy to maintain and each element can be easily replaced.

- The Rhythm bus stop originated from the idea of inserting a sequence of small modular elements along the street in an effort to provide a pedestrian scale experience in a car-dominated environment.

- The modular system allows this bus stop to adapt to different spaces and budgets. A blue tube, like a thread, shapes the space of each bus stop. The tube section is big enough for a person to lean on it, but different kinds of amenities and furniture can be plugged-in. From a normal bench, to a swing, to a place to cycle and recharge your phone, to an open-air library: each bus stop can be customized based on the needs of its community.
COMPONENTS (BASIC CONFIGURATION SHOWN)

Structure and Shelter
A ceiling of aluminum channels diffuses sunlight, collects rainwater, and allows for open air flow.

Amenities
Amenities include: hydration station, rotating bench/counter tops, and schedules. The larger bus stop would include lockable storage for micro retailers or anyone else interested in renting the stall for a day.
CONFIGURATIONS

Small Configuration
The small configuration is a minimal shelter designed with a small five-foot-wide footprint, making it flexible for locations with little room.

Medium Configuration
The medium configuration includes a shelter very similar to the small configuration, one bench is removed to provide access to an additional shelter behind. The shelter behind acts doubly as a stall for various programs such as a library, micro-retail, or a ticket booth.

Large Configuration
The large configuration is composed of three shelters which form a mini street-side piazza. Two shelters feature typical bus stop amenities (benches and shade) and the third shelter can transform into a stall similar to the one in the medium configuration but larger.
Diffuse is a scheme driven by the idea of reflected and refracted light, both in a design sense and a programmatic sense. The diamond-like quality of the shelter is meant to be a metaphor of the reflection and refraction of the neighborhood's ethos. The shelter is designed to provide a space for community happenings and also a place where the community is made visible to the greater city.

The shelter itself is composed of overlapping aluminum channels that block direct sunlight while gently diffusing it to the users below. The channels also act as gutters to collect and deliver rainwater to planters below. Below the light-diffusing shelter are transforming benches that can be rotated into table tops. The intent for the transforming benches is to create a bus stop that has a dual function. When in the table-top position the stop can be used as a booth for a small retailer, a library, a ticket booth, or whatever the community needs.

The diagram above illustrates the multiple configurations made possible by the rotating benches. The community can set it up as a pin-up wall for posters, shelves for books, countertops for exchange, or benches for resting.
COMMUNITY DESIGN COMPONENT

Prior to construction of the shelter, the community will be engaged and asked to participate in the final design. The community will have three options in what shape and wood they would like to use for the benches. Finally, the community will work with a local artist to create a graphic representative of the neighborhood which will be added to the benches.

STEP 1: SHAPE SELECTION

Diffuse  Square  Iceberg

STEP 2: MATERIAL SELECTION

Western Red Cedar  Northern White Cedar  Teak

STEP 3: COMMUNITY GRAPHIC DESIGN

Community-Designed Graphic  Bus Shelter  Final Design
With Project
Online Community Tool
Add your ideas or proposals here.

Map challenges and opportunities here.
Describe your idea (maximum of 140 characters)
facilities people Openspace Trees improvement ilovethisplace sunshine activities toilet children sea!!!! transport park safe view pet youshouldgo water universal design fitness tree fishing elderly space Greening bench wind noise music Thesenior(Elder) grass elders cycling area user inconveniencenaccess waterpond ventilation Plants protect furniture plant lunchtime cover pond voice block caring health railing

You can also add your own keywords, comma separated.

health
Choose a location

Marysville and Grand, Sacramento, CA
Del Paso Heights Sports Center
Purple = Food Amenities:
1. Pothong Asian Market
2. Crown Market Shopping Center
3. Park n' Save Market
4. Foods Co Shopping Center
5. Long John Silver's Fast Food
6. Starbucks
7. Jack in the Box
8. McDonald's
9. Norwood Shopping Center
10. Jimmy's Deli
11. Comfort Market Grocery Store

Orange = Local Schools:
1. Del Paso Heights Elementary
2. Fairbanks Elementary
3. Del Paso Heights Library
4. Glenwood School
5. Harmon Johnson Elementary
6. Garden Valley Elementary
7. North Avenue Elementary
8. Grant Union High School
9. Michael J. Castori Elementary
1: Robertson Park
- Baseball Field
- Three Basketball Courts
- Community Center
- Restrooms
- Skatepark
- Soccer Field
2: Del Paso Park
- Two Baseball Fields
- Play Area
- Connected to School
3: Paso Nueco Street Park
- Walking Paths
- Play Area
- Soccer Field
- Stage
- Pond
4: Redding Park
- Bike Paths (part of loop system)
5: North Ave. Park
- Picnic Area
- Connected to School (closed)
6: Del Paso Heights Park
- Baseball Field
- Play Area
7: Hagginwood Park
- Soccer Field (all weather)
- Seven Picnic Areas
- Baseball Field
- Basketball Court
- Community Center
- Play Area
8: Castori Park
- Connected to School
**7 Fields**
Amenities: Baseball diamonds, concession stand, restrooms, 10 picnic tables, 7 backstops, 1 scoreboard, 3 grandstands, storage in rear.

**4 Fields, 1 Track**
Amenities: 3 lighted softball fields, 1 lighted football field, snack, concessions, restrooms, and water stations.

**1 Field**
Amenities: Play structure, restrooms, pavilion, picnic area, 3 lighted softball and volleyball courts, 5 tennis courts, horse shoe pit, baseball field, basketball courts, batting cages, trail, walkway.

**2 Fields**
Amenities: Shade park, restrooms, 1 soccer field, open turf area, water spray area, ice, play area, adventure play area, picnic spaces, community center, 3 basketball courts, 1 baseball field.
DPHSC will

• Create a location for local youth and adult sports in a self-sufficient model.

• Become a destination for regional families and a reason to come into Del Paso Heights.

• Provide local economic opportunity for retail stores and eateries.

• Introduce a location for residents to gather in a safe, social environment around food or sports.
Activating a corner lot

PROPOSAL:
To create an indoor soccer center/Cultural Center in the northern end of the site in a location where the client currently has proposed a parking lot.

REASONING:
After doing research on the site and laying things out, it will be very difficult to create space for soccer on the site. Because of the constant use of the baseball fields for tournaments, there would be little time to use the soccer fields if they overlapped the baseball fields like they would have to on the site. Because of this, I want to propose an indoor soccer center similar to the basketball center they are doing in phase 2. This center would be located in the northeast corner of the site instead of a parking lot. This site is important because it is a spot that is underutilized and there is just enough room for 3 futsal fields and 3 batting cages. This would help the site by giving it more building frontage and constant traffic of people in and out of the building because of games. This would make the corner much safer than it would have been if it was a parking lot.

Also, it would be the beginning of more businesses on this street and pave the way for retail and restaurants going into lots across the street in the near future.

GOALS:
- Create a space for soccer on the site that is going to help create revenue along with the basketball center and baseball fields.
- Create a template of design that can be moved forward into the design of the basketball center in phase 2.
- Create building frontage along Norwood Ave. to help create a more active area.
- Create a connection between both sides of the site through Architecture/Design.

PROGRAMMING:
- 3 FUTSAL FIELDS
- 1 WARM UP FIELD/BATTING CAGES
- CULTURAL SPACE
- ECO TERRACE
- VIEWING SPACE
- GATHERING SPACE

PRECEDENTS:
ROOFTOP DECK
VIEWING MOUND
SHADING PANELS
SOLAR PANELS
ECO ROOF
FUTSAL FIELDS
VIEWING DECK
CLASS ROOF/GALLERY
MIXED USE SPACE
RETAIL SPACE
Terminus
Sports Facility
DPHSC Connector
Community Porch
The Hub
Beyond Bleachers
Place
Through
Pavilions

safety defined by

needs

access to water
fresh air
food
rest

household familiarity

pathways provide opportunities
The Green Connection

Strengthening | Ecology Connectivity Health
Activate + Inhabit

Robertson Park Sacramento, California
Past Work

on which we’ve built our strategies
Educational Context

Education in Lachish was traditionally carried out in the vernacular. The new school at this historic site is a clear arts education center, led by the Israeli state, operated by Arts groups. Some of these schools are established in the main areas of Levi and generally attended by the local community throughout the year and Holiday.
challenging these dependencies with new technologies and paradigms for living.
sustainable taiwan
1-D 新科館庭園

3. 施工時與現在比較
2-C. 生態露台
The long-term goal of the Katrina Furniture Project is to maintain community furniture workshops that will train local employees in the craft of making furniture and, where necessary, in the fundamentals of operating these workshops.

The Project focuses on three priority neighborhoods, each of which has donated a public building in need of reconstruction that will become a workshop. The three buildings will be restored through community-based design/build studios conducted by the University of Texas Austin, Tulane University, and Art Center College of Design in Pasadena, CA. The faculty and students will collaborate with neighborhoods to design, renovate and equip the buildings for use as fully functioning carpentry and furniture workshops.

The workshops have been organized as an independent not-for-profit organization and will be used to train community members in the crafts of carpentry and furniture-making, and in the fundamentals of operating the workshops safely and economically. The workshops will also act as local community centers with weekend sessions to teach community members skills to rebuild their homes by providing tools and expertise.

KATRINA
As a native of New Orleans, I can say that this material has a special relationship to the culture... we are working with virgin cypress that came on barges down the Mississippi 150 years ago.
We can take the debris, exponentially increase its value, avoid future ecological degradation of this place, and provide a continuation of New Orleans' use of an invasive recovery process, creating potential means of well-being for future generations.
R30.12

Conclusion

Patty's house explores many aspects of building a comfortable, sustainable house that is elevated and structured to meet the demands of the Mississippi Gulf Coast.

The rooms beneath the house are well-used, creating cool, shaded spaces for sitting and gardening. The stair is brought into the mass of the house to make an indirect entry sequence. The house is natural among the trees and garden, and the views from the house are rewarding. The house form and structure respond to surrounding trees, so it is fitting that neighbors and friends of Patty refer to it as "the treehouse."
R30.09
Bedroom

The west wing of the house includes the bedroom, bathroom, and laundry room. The utilitarian spaces are nestled on either side of a small entry foyer, giving the bedroom a protected and spacious feel. As in the living room, the ceiling is vaulted.

The floor as well as the walls and ceiling are pine, creating a warm, contained room. A window box on the west wall (see slide 10) is the right scale for a seat and storage and frames a spectacular view of the sunset.

A ductless mechanical system meets the LEED certification and allows the dog-trot split and vaulted ceilings. Other elements of LEED certification include bio-based spray foam insulation and slate floors.
ALLEY FLAT INITIATIVE

Applied Research and Service Learning
Working Toward a Sustainable Future
For All Austin

Partnerships: GNDC
ACDCC

Major Sponsors:
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"Alley Flats Tackle Affordable Green Housing in East Austin"
KVUE, December 5, 2007
"Austin Now", November 2005
www.alleyflatinitiative.org

UT Austin - School of Architecture
Leads to participatory processes of design and building