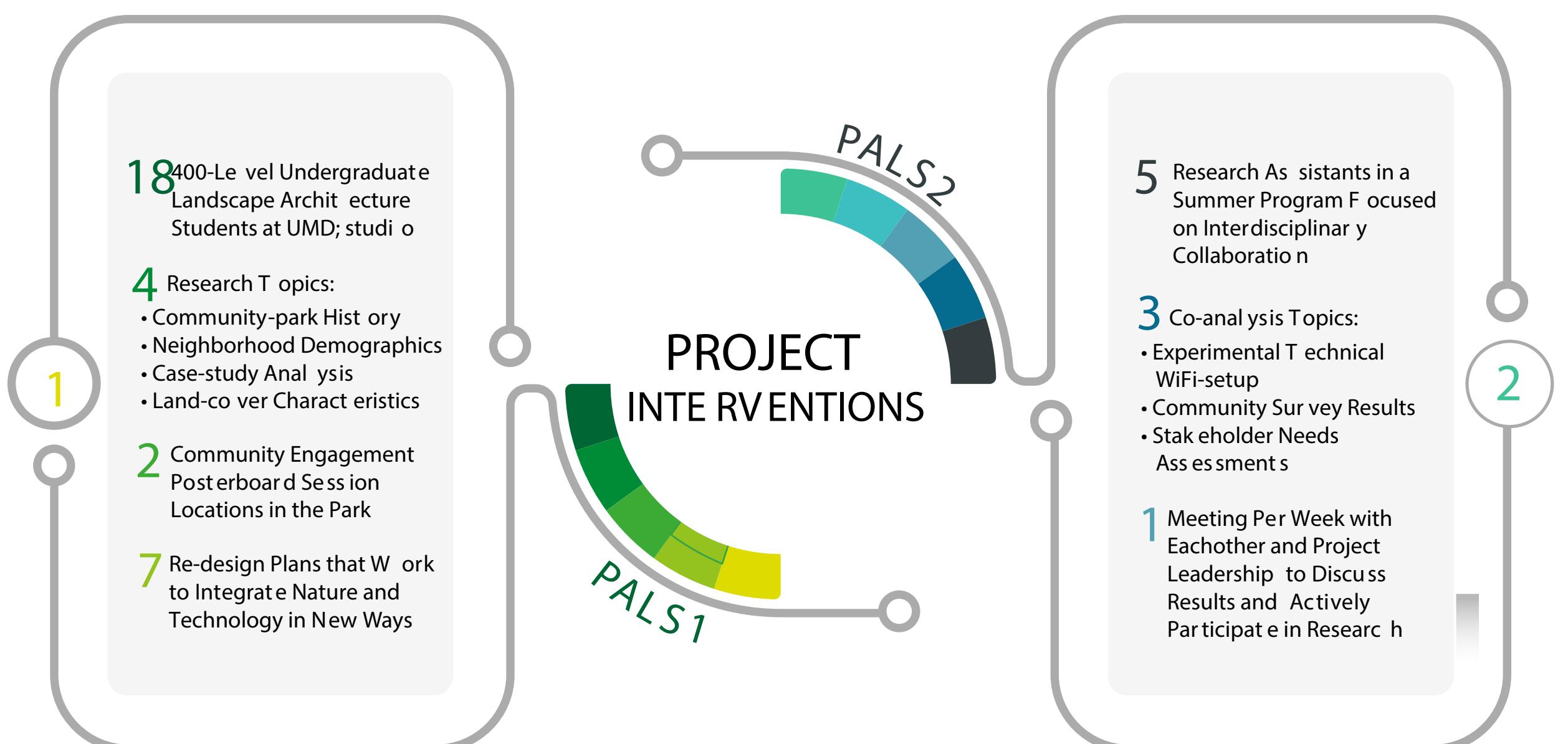


# ABSTRACT

Broadband infrastructure in urban parks may serve crucial functions including an amenity to boost overall park use and a bridge to propagate WiFi access into contiguous neighborhoods. This project: SCC:PG Park WiFi as a BRIDGE to Community Resilience has developed a new model—Build Resilience through the Internet and Digital Greenspace Exposure, leveraging off-the-shelf WiFi technology, novel algorithms, community assets, and local partnerships to lower greenspace WiFi costs. This interdisciplinary work leverages: computer science, information studies, landscape architecture, and public health. Collaboration methodologies and relational definitions across disciplines are nascent—especially when paired with civic-engaged research.

Student researchers (UG/Grad) are excellent partners in bridging disciplinary barriers. Their capacity to assimilate multiple frameworks has produced refinements to the project's theoretical lenses and suggested novel socio-technical methodology improvements. Further, they are excellent ambassadors to community partners and stakeholders.



## OVERALL CONTRASTING RESULTS

**MODEL 1**

Tried & True Approach  
Produces Standardized Reliable Products  
Civic Groups Love the Diversity of Action Plans

**MODEL 1**

Work is Group Based  
Independence to Explore Topics or Themes of Interest is Limited

**MODEL 2**

Fosters Interdisciplinary “Dictionary Building” then used by the full team  
Independence in Learning Outcomes

**MODEL 2**

Deepens Methodological Approaches  
Allows for Student Stipends

**MODEL 2**

More Research Support Needed  
Intensive Timeframe Needed

### ACKNOWLEDGMENTS

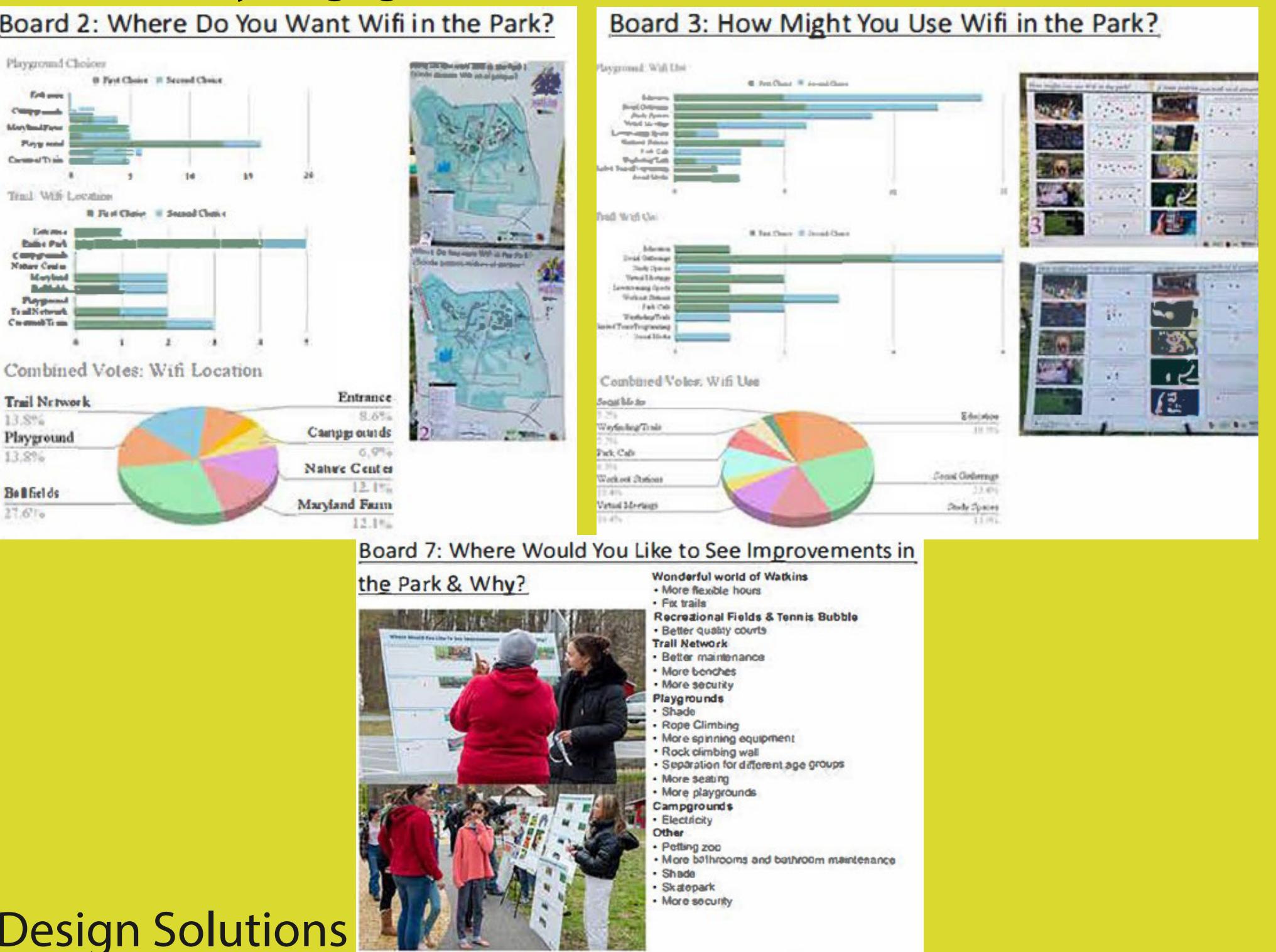
The team is grateful to all students who participated in executing the model interventions.

Students whose work is presented in Model 2 results include: Irtaza Shahid, Yang Bai, Boyoung Park, Nitzan Koren, Marci-Ann Smith and Micaela Ada

## MODEL 1



### Community Engagement Results



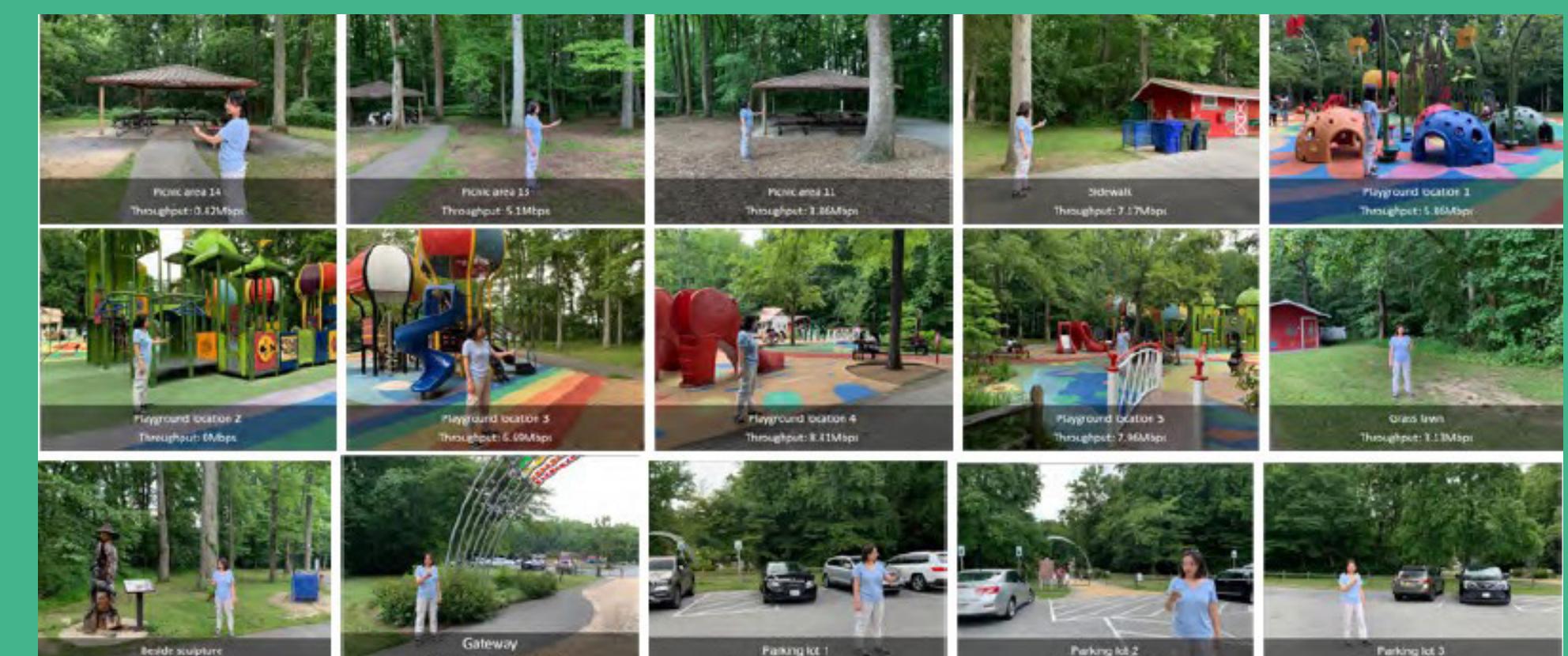
### Design Solutions



## MODEL 2



### WiFi Prototype and Testing



- Internet service supplied by an adjacent park building
- Internet connection speed tested at many locations
- LAN created via a pair of CPE connections
- Students tested real world prototype performance

### Community Survey Results

entertainment education moreevents watchvideos  
don'tneedwifi attractpeople convenience wanttodisconnectfromscreens  
staylongeratthepark helpful improvethepark schoolassignments stayconnected  
work\_stayconnected work\_stayconnected helpfulemotions  
don'tcare parkrelatedrequests negative  
wantstodisconnect wantstodisconnect  
attractyoungpeople timelymanner  
implementinotherparkstoo findinformation\_surfttheweb  
parkingwifiaccommodations lovetheparkasis  
positivefeedbacktotheparks  
hopethiswillnotdistractpeoplefromnature

- Survey produced 427 “cleansed” responses
- Household size & children < 18 used as covariates
- Questions were grouped into 7 research domains
- Students open coded 79 unique textual responses

# Frameworks for Student Research Engagement on Interdisciplinary Civic-Engaged Projects

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