

"Filling the Gaps: A Scalable Model for Matching Vacant Land with Modular Housing in Urban Pennsylvania"

Submitted by: Dr. Evaine K. Sing, RLA, LEED AP

[LinkedIn Profile](#) | ekssolutions.com

Issue and Significance

Vacant properties are a constant and growing challenge for many new cities, as is the increasing need for affordable housing. It would seem, then, that the two challenges have an opportunity to benefit each other – a two for one, in some sense. Over the past decade, legislative tools have begun to be crafted to address some of the barriers toward reclaiming vacant property, just as new financing tools have evolved to encourage more affordable development. However, if it was as easy as that, we likely would no longer be struggling with either issue as much as we have to date.

Western Pennsylvania is at a critical juncture in its efforts to ensure equitable, resilient, and community-centered housing development. In cities like Pittsburgh and surrounding legacy communities, decades of population loss, economic transition, and structural disinvestment have left thousands of vacant and underutilized parcels. These sites, while often seen as liabilities, represent tremendous potential for transformation. Yet, public policy and development tools have not kept pace with the complex needs of communities grappling with racialized displacement, climate adaptation, and the preservation of neighborhood identity.

The housing crisis in Pennsylvania, like much of the nation, is multifaceted: rents and home prices are rising faster than wages, aging housing stock requires upgrades for health and efficiency, and redevelopment often sidelines existing residents. In Pittsburgh, land speculation has driven up costs even in historically affordable neighborhoods. At the same time, the region's climate vulnerability—particularly in terms of stormwater, urban heat, and flood risks—makes it imperative to integrate resilience into any future housing strategy.

The proposed project—**Filling the Gaps**—aims to develop a replicable, policy-aligned model for pairing vacant, underutilized urban land with modular, cost-effective housing solutions in Pennsylvania's legacy cities, beginning with the City of Pittsburgh and adjacent Borough of Wilkinsburg as the focus of the study. The project supports PHFA's mission by addressing systemic barriers to affordable housing through innovative planning, land use strategies, and policy alignment, especially in high-vacancy, post-industrial neighborhoods where infrastructure exists but reinvestment is uneven.

Modular housing offers a promising solution for affordability, speed of deployment, and quality control. However, its potential remains largely untapped in urban Pennsylvania due to zoning, parcel irregularity, infrastructure readiness, and financial structuring challenges. This project will bridge that gap—by identifying ideal sites, engaging community partners, and modeling real-world feasibility and cost.

Pittsburgh is uniquely positioned as a pilot city with over 27,000 vacant lots across the city, many publicly owned. The city also has a legacy of topography and fragmented development, leading to irregular lots often unsuitable for standard construction and a growing interest in modular housing and prefabricated construction from local builders and housing authorities. There is also a rich network of CDC partners, land banks, and philanthropic actors ready to test new approaches.

Meanwhile, the Borough of Wilkinsburg may add additional context for smaller governing municipalities facing many of the same challenges as larger cities but without the robust network of partners, sources of funding and capacity.

Methods and Work Plan

The project will use a mixed-methods approach combining spatial analysis, policy research, stakeholder interviews, and strategy development. The work will be grounded in site-specific research in the City of Pittsburgh and Borough of Wilkinsburg but structured to create a replicable model applicable across Pennsylvania's legacy cities. The work plan spans 12 months (January–December 2026) and is organized into four overlapping phases. The work will be based in Pittsburgh, with travel to neighboring municipalities as needed. I will utilize workspace and administrative support from EKS Solutions and collaborate with community development organizations already engaged in equitable housing.

Q1: Map and analyze land and infrastructure data; review zoning, permitting, and modular housing regulations.

Q2: Stakeholder interviews; identify and evaluate pilot parcels in Pittsburgh and Wilkinsburg; develop typology matrix for modular housing options; draft initial policy analysis.

Q3: Create implementation toolkit for strategic infill; consult with local stakeholders on alignment opportunities.

Q4: Finalize report; present findings; propose pilot recommendations for further study or implementation across Pennsylvania cities.

PHASE 1: Baseline Research ' Framework Development (Jan–Mar 2026)

During this phase I will define the criteria for identifying high-potential sites for infill housing and build a foundation for replicable decision-making model. Specifically, I will conduct parcel-level spatial analysis of vacant and underutilized lots, overlay infrastructure, zoning, and tax-delinquency data, review housing typologies (with emphasis on modular construction) and inventory local, county, and state policy frameworks influencing housing and land reuse. This will be done through GIS mapping and data analysis, a literature and policy review and a regulatory scan of zoning codes and permitting processes.

PHASE 2: Stakeholder Engagement ' Case Study Documentation (Mar–Jun 2026)

By gathering insights from practitioners, policymakers, and community leaders, I'll be able to validate research findings through lived experience and local knowledge. I will conduct 10–12 semi-structured interviews with land banks, land trusts, local government officials, housing developers, and CDCs. Ideally, this will allow me to identify 2-3 pilot parcels in Pittsburgh and Wilkinsburg for a deep-dive analysis and help identify community-informed design and development criteria.

PHASE 3: Toolkit and Policy Model Development (Jun–Sep 2026)

The findings generated will be translated into a practical model for use by Pennsylvania municipalities with recommended policies and zoning amendments to support modular infill housing. During this phase, I will draft a modular infill decision-support toolkit for planners and local officials. In addition, I'll develop site typologies with associated design parameters and regulatory paths. And finally, I'll create sample policy templates (e.g., zoning overlays, permit streamlining guidance). These activities will be a result of the synthesis of interview, spatial, and policy data and be compared with other legacy cities.

PHASE 4: Dissemination & Recommendations (Oct–Dec 2026)

The last phase of this fellowship will be set aside to finalize the project deliverable and findings including the written report, toolkit, policy briefings and more to ensure this project has real-world application and usefulness.

Final Product and Dissemination

The final product of *Filling the Gaps* will be a comprehensive, practitioner-oriented report and toolkit that equips Pennsylvania communities to transform vacant, underutilized urban land into opportunities for modular, affordable housing. Grounded in applied research from the City of Pittsburgh and Borough of Wilkensburg, the deliverables will serve as a replicable model for municipalities, land banks, CDCs, and housing authorities across the Commonwealth.

Final products will include a project report with a summary of findings and policy recommendations. In addition, I will craft a modular infill housing toolkit that outlines guidance for assessing site readiness and selecting housing typologies along with policy templates, model zoning overlays and strategies for aligning state-level programs (e.g., PHFA financing tools) with local redevelopment goals. This information will be supported by GIS-based parcel analysis, interview summaries and supplemental materials.

The findings and tools will be disseminated through a multi-pronged strategy aimed at reaching both local practitioners and statewide policy audiences including a presentation that can be shared with partners to help engage local officials, nonprofit housing leaders, developers, and advocates from across Pennsylvania. The final report and toolkit will be available for download on the EKS Solutions website and promoted through relevant networks, including the Pennsylvania Chapter of the American Planning Association (APA PA), Pennsylvania Housing Alliance, as well as local and national organizations. Finally key policy recommendations will be packaged into brief memos for state and local government partners. Where appropriate, the findings will be adapted into grant proposals or pilot programs in partnership with municipalities or PHFA.

Evaine K. Sing

Doctor of Social Sciences

Registered Landscape Architect, LEED AP

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LINKEDIN www.linkedin.com/in/eksing

EXPERIENCE

EKS Solutions LLC

Community Consultant, Owner
June 2019 - Current

Providing embedded capacity for small businesses and non-profits who need additional short-term support related to strategic planning, inclusive engagement, operationalization of ideas, innovative program design, data collection, mapping, analysis, community design, policy and program development, facilitation, research and evaluation, and systems implementation.

Grounded Strategies

Executive Director
May 2012 - May 2019

Established revenue generating program that aligned mission with market need; Established a significant cash reserve; Successful rebrand; Recruited and managed a highly diverse team; Developed internal processes and operational systems; Supported programs through project management, research and policy; Planning, design and community engagement around policy and physical improvements in the issue of vacancy, blight and long-term land use; Extensive hands-on volunteer management and project implementation in partnership with community partners and residents. *Formerly COO, Operations & Programming Director; Project Manager*

Independent Consultant

September 2009 - December 2010

Office of the Mayor, GreenUp Pittsburgh: Vacant lot conversions for community use in collaboration with Department of Neighborhood Initiatives and Public Works.

cityLAB: Analysis of demographics for an urban experiment looking to attract a new population to a target neighborhood within the City.

East Liberty Housing Inc: Design of new play area with Board of Directors, Property Manager and residents, creatively converting a parking lot into an urban playground.

Burt Hill

Landscape Architect/ Project Manager
January 2006 - September 2009

Initiated and maintained partnerships with strategic partners. Evaluated project opportunities, proposal responses, grants and publications. Comprehensive planning and incorporation of LEED strategies. Prepared and managed project budgets, schedules, project accounting and invoicing. Managed production staff and technical support team throughout the design process. Presented design concepts to community stakeholders and approvals boards as well as presenting the firm's qualifications in client interviews.

EDUCATION

Royal Roads University

Doctorate of Social Science
Founder's Award Recipient

Heinz College, Carnegie Mellon University

MS in Public Policy & Management
Magna Cum Laude

Virginia Polytechnic Institute & State University

BLA in Landscape Architecture
Member Sigma Lambda Alpha

TEACHING EXPERIENCE

GIS Instructor

2013, 2015-2019

Chatham University

Dept of Landscape Architecture, Adjunct
Professor: Urban Issues Studio, F2013

Carnegie Mellon University

Dept of Architecture, TA, 2011
Heinz College, TA, F2011, Sp2012, F2012

Community College of Allegheny College

GIS Teaching & Research Assistant/ Lab
Technician, W2012

CERTIFICATES

Rockwood Institute

The Art of Leadership, 2019

CORO

Women in Leadership, Class XVII,
2015

Community Technical Assistance Center

Core Series & Board Duties, 2010

PERSONAL STATEMENT

Project Management
Organization & Time Management
Problem-solving & Decision-making
Public Speaking
Graphic Design
Adaptability & Collaboration
Self-direction
Operationalization

SKILLS

With over a decade of community-based design and engagement expertise and training in the public policy realm, I am well versed in community challenges at the hyper local and regional levels. I have partnered directly with residents on the ground in communities at all stages of development and stability and worked to further long-term plans with local municipal and service partners. Over the last 15 years, I have enabled community driven plans and projects to take place WITH residents to benefit communities and recognize the impact that capacity building efforts can have on personal and group outlook. My strengths lie in breaking down complex problems into actionable steps so that teams can focus on their own talents to do more with less, as is often necessary in small or under-resourced organizations. I enjoy working with those who are passionate about what they do and want to help support the foundations of the work that has come before.

PROFESSIONAL PUBLICATIONS

- Rupp, L. A., Grodzinski, A. R., Sing, E. K., Hohl, B. C., & Zimmerman, M. A. (2022). Resident Engagement in Vacant Lot Greening: Empowering Communities for Neighborhood Revitalization. In *Tackling Vacancy and Abandonment: Strategies and Impacts after the Great Recession* (pp. 163–174). Center for Community Progress, Federal Reserve Bank of Cleveland, Federal Reserve Bank of Atlanta.
- Rupp, L. A., Kondo, M. C., Hohl, B. C., Sing, E. K., Grodzinski, A. R., & Zimmerman, M. A. (2022). The effects of organizations engaging residents in greening vacant lots: Insights from a United States national survey. *Cities*, 125, 103669. <https://doi.org/10.1016/j.cities.2022.103669>
- Sing, E. (2009). Community Rain Gardens Support Urban Renewal. *Urban Land Green*, Spring, 17–19.
- Sing, E. K. (2022). A contextual understanding of vacant land: A Buffalo, NY case study. <https://doi.org/10.25316/IR-17655>
- Teixeira, S., & Sing, E. (2016). Reclaim Northside: An Environmental Justice Approach to Address Vacant Land in Pittsburgh. *Family & Community Health*, 39(3), 207–215. <https://doi.org/10.1097/FCH.0000000000000107>

CONFERENCE PRESENTATIONS

- “Landscape Architects Shaping Space in the Nonprofit Sector.” PA-DE ASLA Annual Meeting, American Society of Landscape Architects PA/DE Chapter. Cranberry, PA. April 2019.
- “The Challenge of Blighted Vacant Land and Models to Address It.” Homes Within Reach Conference, Housing Alliance of Pennsylvania. Harrisburg, PA. October 2018
- ~~“Equitable Community Engagement for Transformative Community Revitalization ” Reclaiming Vacant Properties~~
Conference, Center for Community Progress. Milwaukee, WI. May 2018
- “Main Street Revitalization through Creative Community Collaboration.” Main Streets Now Conference, Main Street America. Kansas City, MO. March 2018
- “Using Technology for Results.” Jefferson Forum: Taking Action for Healthy Communities. Bethel Park, PA. May 2017
- “ReClaim McKeesport: Environmental Justice Through Capacity Building: A Sustainable Return on Investment.” National Environmental Justice Conference & Training Program. Washington, D.C. March 2017
- “Hit the Ground Running: Mobilizing Vacant Land Toolkits.” Reclaiming Vacant Properties Conference, Center for Community Progress. Baltimore, MD. September 2016

FELLOWSHIPS & AWARDS

Leadership Pittsburgh & Rockwood Institute

Lead Now Pittsburgh Fellowship, 2019

Smart Business Pittsburgh

Smart 50 Honoree, 2016

Heinz College

Stephen M. Lauble Community Fellowship, 2012

Pittsburgh History & Landmarks Foundation

Landmarks Fellowship, 2011-12

PROFESSIONAL AFFILIATIONS

Society of Women Environmental Professionals, Member Three
Rivers Chapter, 2018 - current

City of Pittsburgh, Licenses & Inspections Review Board,
2018 - 2020

Landforce, Board Member, 2017- 2019

Pittsburgh Community Reinvestment Group, Board, 2015-2017

American Society of Landscape Architecture, Member, Current

EcoDesigners Guild, Member, 2009-2011

Penn Hills Community Development Corporation, Board Sec, 2010

City of Pittsburgh, Land Recycling Task Force Committee Member,
2010

Re: Kathy A Possinger Housing Policy Fellowship

June 28th, 2022

To Whom it May Concern:

Housing Pennsylvanian's across the Commonwealth requires an interdisciplinary approach connecting policies, systems, communities, *and people*. Evaine K. Sing understands this at a level deeper than almost anyone I have ever met. I whole-heartedly support her goal of becoming the next PHFA Kathy A. Possinger Housing Policy Fellow. Miss Sing's unique perspective, and rigorous, inclusive approach to analysis and problem solving consistently provides those in her circle - be it colleagues, clients, or friends, of which I have been privileged to be all of over the last 10+ years - practical, actionable solutions to complex problems.

It is an honor to be asked to write a letter of recommendation for Evaine knowing the many significant personal and professional relationships she holds. The extent of her existing network provides her with an ability and level of access to facilitate a program deliverable that would otherwise not be possible over any typical 12-month period. Between residents and neighbors, community leaders, philanthropy, local and state elected officials, designers, and developers, Evaine's relationships speak volumes of her reputation as a highly qualified professional and person with a deep sense of integrity and respect for both herself and the quality of her work - which is exemplary - as well as *everyone* she interacts with.

Miss Sing recognizes that people are at the core of any conversation in community development. Her soon-to-be completed doctorate fills a long time gap in the field, formally documenting the connection between vacant land and people. Now an even more trained and effective researcher, a natural extension of this work is to apply this concept to the vast swaths of vacant land that plague all of Pennsylvania - rural, urban, and suburban.

During my tenure serving as Director of the nascent Pittsburgh Land Bank and Manager of Land Recycling for the Urban Redevelopment Authority of Pittsburgh, Miss Sing transitioned from Executive Director of a small land use focused nonprofit to operating her own immediately successful consulting practice. During this transition, Evaine provided seamless and invaluable technical assistance to small, local minority contractors as well as program design and implementation expertise facilitating the coordination efforts of four government agencies in vacant property portfolio maintenance. This type of program had never been attempted before and allowed these agencies to simultaneously: lower barriers to small business government contracting, provide greatly enhanced responsible land stewardship, contribute much-needed economic development to small businesses, create jobs, *and* improve community engagement and relations - all with an eye towards increased operational and cost efficiencies.

This type of innovative approach to incrementally improving a long-time seemingly intractable issue is what sets Evaine apart from her peers. This immensely successful program was designed based on *both* research *and* community engagement. It took into consideration myriad

seemingly conflicting priorities and goals, as well as the complexity of varied regulations amongst multiple agencies. Evaine's unique set of experience, skills, and expertise was at the core of this program from concept through implementation. Any successful deliverable of this fellowship must be rooted in pragmatic, implementable solutions, a value at the heart of Evaine's philosophy to problem solving, as demonstrated by her work time and again.

Please consider this letter an enthusiastic endorsement of my friend and colleague, Evaine K. Sing, and her candidacy to become the 2023 PHFA Kathy A. Possinger Housing Policy Fellow.

Respectfully,

A handwritten signature in blue ink, appearing to read "Bethany E. Davidson", followed by a horizontal line.

Bethany E. Davidson
3rd Generation Lifelong Pennsylvania Resident
Vice President, Community Development Banking, PNC Bank



729 Wood Street
Wilkinsburg, PA 15221
412.727.7855
wilkinsburgcdc.org

Wilkinsburg Community Development Corporation
729 Wood Street
Wilkinsburg, PA 15221
July 29, 2025

Pennsylvania Housing Finance Agency
PHFA Kathy A. Possinger Housing Policy Fellowship Committee
211 North Front Street
Harrisburg, PA 17101

Dear Fellowship Selection Committee,

I am pleased to offer my full support for the application of Dr. Evaine K. Sing to the Kathy A. Possinger Housing Policy Fellowship. As Executive Director of the Wilkinsburg Community Development Corporation (WCDC), I have had the privilege of collaborating with Dr. Sing on several initiatives aimed at advancing equitable development and strengthening community-based planning in Wilkinsburg and the broader Pittsburgh region.

Dr. Sing brings an exceptional combination of professional expertise, research insight, and on-the-ground knowledge to the field of affordable housing and urban revitalization. Her proposed project—to develop a replicable model for matching vacant land in urban Pennsylvania with modular housing—could not be more timely or relevant. Communities like Wilkinsburg face a persistent challenge: we have available land and aging infrastructure, but face systemic barriers to delivering affordable, well-designed housing at scale. Dr. Sing's approach, grounded in feasibility analysis, land use typologies, and scalable policy recommendations, directly addresses those challenges.

What makes Evaine's work stand out is her ability to bridge policy innovation with implementation. She has a deep understanding of how communities like ours function—our constraints, our potential, and our people. Her efforts with WCDC have helped shape our Strong Neighborhoods Initiative, prioritize equitable land use strategies, and incorporate sustainability and stewardship models into our development approach. Her project will not only benefit Wilkinsburg but will create tools and frameworks that PHFA and partners across Pennsylvania can adapt for cities like Erie, Reading, and Harrisburg.

The WCDC is eager to serve as a community partner and possibly pilot site for Dr. Sing's fellowship work. We look forward to collaborating on identifying eligible sites, engaging residents in design dialogues, and applying findings to local policy conversations about zoning, land reuse, and development incentives.

In short, Dr. Sing is a trusted thought leader and practitioner, and this fellowship will be an ideal platform for her to generate actionable, community-centered housing policy solutions.

Please feel free to contact me at [tracey@wilkinsburgcdc.org] or (412) 727-7855 if you require additional information. We are proud to support this important work.

Sincerely,



Tracey Evans
Executive Director
Wilkinsburg Community Development Corporation