

Exploring Pathways to Community Safety and Restorative Justice in Eastwick, Philadelphia



About the Urban Land Institute

The Urban Land Institute (ULI) was established in 1936 as a nonprofit educational and research institute. It is supported by more than 46,000 members in 84 countries representing all aspects of land use and development disciplines. ULI's mission is to provide leadership in the responsible use of land to create and sustain thriving communities worldwide. ULI Philadelphia has nearly 900 members in the Philadelphia District Council, which includes the Philadelphia metropolitan area, Central Pennsylvania, the Lehigh Valley, Delaware, and Southern New Jersey. ULI provides guidance to nonprofits and municipalities seeking solutions to land use challenges. Its Technical Assistance Panels objectively evaluate specific needs and make recommendations on implementation in an atmosphere free of politics and preconceptions. ULI member and non-member professionals provide their expertise in a voluntary capacity and each has signed an agreement to prevent current and potential conflicts of interest.

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ULI Advisory Services: National and Global Programs

Since 1947, the ULI Advisory Services program has assembled well over 700 ULI-member teams to help sponsors find creative, practical solutions for complex land use challenges. A wide variety of public, private, and nonprofit organizations have contracted for ULI's advisory services. National and international panelists are specifically recruited to form a panel of independent and objective volunteer ULI member experts with the skills needed to address the identified land use challenge. The program is designed to help break through obstacles, jump-start conversations, and solve tough challenges that need an outside, independent perspective. Three- and five-day engagements are offered to ensure thorough consideration of relevant topics. An additional national offering is the project analysis session (PAS) offered at ULI's Fall and Spring Meetings, through which specific land use challenges are evaluated by a panel of volunteer experts selected from

ULI's membership. This is a conversational format that lends itself to an open exchange of ideas among diverse industry practitioners with distinct points of view. From the streamlined two-hour session to the "deeper dive" eight-hour session, this intimate conversational format encourages creative thinking and problem solving. Learn more at americas.uli.org/programs/advisory-services/. Distinct from Advisory Services panels, TAPs leverage local expertise through a half-day to two-day process.

ULI Advisory Services: District Council Programs

The goal of the ULI Advisory Services program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. The ULI Philadelphia technical assistance panel (TAP) program has assembled over 187 ULI-member teams in service of ULI's mission to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. Drawing from its local membership base, ULI Philadelphia conducts TAPs offering objective and responsible advice to local decision-makers on a wide variety of land use and real estate issues ranging from site-specific projects to public policy questions. The TAP program is intentionally flexible to provide a customized approach to specific land use and real estate issues. In fulfillment of ULI's mission, this TAP report is intended to provide objective advice that will promote the responsible use of land to enhance the environment. An additional local offering is the project analysis forum, which offers a shorter format for district councils to employ local member expertise to address regional land use challenges. Panelists are land use professionals uniquely positioned to address the specific challenges at hand, and provide in-depth, project-specific, and pragmatic recommendations. The intimate, conversational format

Distinct from Advisory Services panels, TAPs leverage local expertise through a half-day to two-day process.

encourages creative thinking and problem solving between the panel and the sponsor. Learn more at www.philadelphia.uli.org

ULI Urban Resilience Program

ULI's Urban Resilience program provides ULI members, the public, and communities across the United States with information on how to be more resilient in the face of climate change and other environmental vulnerabilities. The program seeks to provide technical assistance, advance knowledge, and catalyze the adoption of transformative practices for real estate and land use policy, building from the knowledge of ULI members.

Resilient Land Use Cohort

This Technical Assistance Panel is part of a larger series of resilience technical assistance and learning opportunities, called the Resilient Land Use Cohort (RLUC). The RLUC is a network of ULI district councils, member experts, and community partners in five cities working together to identify strategies to be more resilient in the face of climate change and other vulnerabilities, including floods, extreme storms, drought, wildfire, and extreme heat, as well as the related social, environmental, and economic impacts. The RLUC provides on-the-ground technical assistance through ULI's flagship technical assistance models: Advisory Services panels and technical assistance panels. These panels leverage ULI member expertise to advise on complex real estate and land use challenges related to climate resilience, addressing planning, zoning, land use, development strategy, housing, and infrastructure. ULI's Urban Resilience program convenes the cohort regularly to learn from national best practices and discuss peer cities' next steps advancing resilience through land use policies and development strategies. Funding for this engagement and the cohort is provided by the ULI Foundation through support from JP Morgan Chase & Co.

NICE
WEATHER, PAGE 12

COLWYN RESIDENTS IRKED BY DUMPING — PAGE 5

DELAWARE COUNTY, DAILY TIMES Wednesday, August 12, 1987 5

Landfill stirs up neighbors

Colwyn dump raises health, safety worries

By JEFFREY CRAIG
Daily Times Staff Writer

COLWYN — Fred Leasher spent a lot of time as a child on the banks of the Cobbs and Darby creeks. He used to fish and boat in the water and he can remember playing football and baseball on the old Frank Burr Athletic Field which lies along Cobbs Creek just behind the neatly-kept homes of 2nd Street.

Leasher, a 30-year-old real estate investor who recently returned to his hometown, says those days are over because of a borough decision to use the old athletic field as a landfill.

"Colwyn does not need a dump. This is a residential community which happens to have a natural waterway running through it," Leasher said. "The residents here do not want a dump or landfill right in their backyard. And what's worse, they weren't even told about it."

Several residents have joined Leasher in opposing the 2-year-old landfill.

William Fletcher, of the 600 block of 2nd Street, said he is concerned with the loss of wildlife in the area, the loss of a natural floodplain and the danger to neighborhood children.

Michael Doyle, 13, contracted gonorrhea osteomyelitis, a life-threatening illness, after he stepped on a rusty nail while playing at the site in July 1986, according to S. Stanton Miller, the attorney for the family.

Doyle spent six weeks in the hospital and his family owes over \$33,000 in medical bills, according to Miller.

The family filed suit in Delaware County Court against the borough in January 1986.

According to borough manager Jack Frasier, borough officials received a permit from the state Department of Environmental Resources to dump "clean fill" at the site. The municipality then contracted with the Delmont Construction Co. of Newtown Square, to fill the site and grade it on a gradual slope from behind 2nd Street down to the creek.

"No decision has been made on what to



Daily Times staff photo by PETE ZINNER

The Colwyn landfill behind the 200 block of 2nd Street.

do with the site after it is filled," Frasier said. "As it stands now, though, it is only a habitat for mosquitoes. Besides, Colwyn does not have room for or need a wildlife refuge."

Another resident, Paul Muser, who is seeking a council seat in November, says that there is no borough supervision of the site and "consequently the dumpers, both illegal and legal, abuse their privilege and dump all kinds of garbage in there."

Borough Police Chief William Garrity said "three or four" violators had been cited for illegal dumping in the past.

George Paylor, the borough's code enforcement officer, said the site is routinely checked. Paylor also said that the landfill is fenced and its only entranceway is locked.

The locked entranceway is adjacent to the Colwyn Swim Club. Beyond the gate, a dirt road runs along Cobbs Creek for about 75 yards before opening onto the field which stretches about 200 yards

from the behind the houses of the 500 block of 2nd Street to Cobbs Creek. Approximately one-quarter of the area directly behind the houses is levelled and rises about 25 feet above the rest of the field. The lower part of the site is filled with 10-foot-high piles of broken concrete, stone, blacktop and dirt. Two old white goalposts rise out of the weeds and debris. A water heater, washer, smashed television set and several tires are strewn about the site.

"It's only a landfill. It's not a garbage dump or a toxic waste hazard," Paylor said, adding the borough may be planning to develop a recreational park on the site after the landfill was complete.

DER spokesman Paul Ciotta confirmed that the borough had a permit to place "clean fill" at the site.

According to Ciotta, "clean fill" is defined as dirt — not concrete, cement, asphalt or blacktop, which is defined as DER's demolition material.

Ciotta said that the borough did not have a permit to dump demolition material and a "DER investigation of the site will be forthcoming."

Paylor, who is also the Democratic Committee chairperson, charged that the opposition to the dump was "politically motivated."

Dennis Henshaw, a Democratic member on the five-to-two Democratic-controlled borough council said, "I think the information coming to you about this dump is just lies from someone running for council and trying to stir things up."

Leasher, who is a member of the Darby Creek Valley Association, said he had "no political motivations but I am concerned about property values."

"This could be made into a beautiful area. I just want them to stop where they are and have some discussions about how to return this area to its natural state," Leasher said.

ULI PHILADELPHIA

Newspaper article shows health equity concerns dating back to 1987.

CONTENTS

Introduction	7
Background	8
Scope	10
Assessment	11
Recommendations	16
Conclusion	20
Panelists	21
Stakeholder Participants	23



Area map showing the Planet Streets (study area), the proposed relocation site, and additional tour sites (Clearview Landfill and Pepper Bowl) with FEMA floodplain levels overlaid.

INTRODUCTION

Eastwick United Community Development Corporation (CDC) and the Office of Sustainability of the City of Philadelphia (the sponsors) engaged with ULI for a Technical Assistance Panel (TAP) to help develop a plan for improving the safety and well-being of Eastwick neighborhood residents, who currently live in a floodplain and have experienced severe, repetitive flooding. Working in partnership, Eastwick United CDC and the Office of Sustainability were interested in exploring the idea of a land swap arrangement that would allow the most at-risk homeowners in the neighborhood to relocate to new housing on a currently undeveloped parcel of land owned by the City of Philadelphia and situated on higher ground within the Eastwick neighborhood.

ULI convened a panel of practitioners with relevant expertise to evaluate a land swap arrangement and any additional alternatives that would accomplish the following objectives put forth by the sponsors:

- Support the safety of residents in the floodplain amid growing risks of climate change
- Preserve a sense of community as residents relocate to safer housing
- Provide replacement housing at no additional cost to residents
- Safeguard household generational wealth from disaster and more loss

The panel, composed of an economic development consultant, a real estate project manager, engineers, and city planners, met on November 3-4, 2022 for the TAP. On November 3, the group convened at the Marriott Hotel on Island Avenue in the Eastwick neighborhood, taking a bus and walking tour of key focus areas. Later in the day, panelists met in groups with stakeholders,

including community leaders, local residents, city and state representatives, representatives from the U.S. Environmental Protection Agency (EPA) and Federal Emergency Management Agency (FEMA), and engineers tasked with studying the flooding and the feasibility of an area levee. The “Eastwick Neighborhood” map on page 6 shows the landmarks visited during the bus tour and the area highlighted in purple, the “Planet Streets,” where the panelists toured the neighborhood on foot.

The panel met on the second day in the Innovation Lab at the Municipal Services Building in Center City Philadelphia, where they shared their findings and developed a set of recommendations to address questions raised by Eastwick United CDC and the Office of Sustainability. At the close of the afternoon, the panel shared its work in a public forum at the Academy of Natural Sciences, attended by stakeholders and other interested parties.

The panel assessed the land swap approach and evaluated it based on how it met the stated objectives, adding timing and feasibility to the list of criteria as important considerations. In their recommendations, the panelists outlined the planning, financing, and execution steps involved in a land swap, and looked at pros and cons that could factor into the community’s decision to pursue this arrangement. Additionally, the panelists explored alternatives to the land swap and proposed some immediate solutions to address flooding and the health and well-being of residents.

BACKGROUND



Isaias Flood Recovery Project yard sign.

The information presented in this section on the history of the Eastwick community was provided to the panelists by the sponsors as briefing materials to review or from information collected during the stakeholder interview process.

The neighborhood of Eastwick has endured environmental and civil injustices for decades. Prior to the 1950s, Eastwick had been an integrated, peaceful middle-class neighborhood. As the city's lowest-lying area, situated between Darby and Cobbs Creeks and the Schuylkill and

Delaware Rivers, Eastwick was settled in the 19th century as a largely agrarian area, originally named Kingsessing. During this time, it was known for its fertile soil, farms, and John Bartram's Garden, which has since become the longest surviving botanical garden in the country. At the turn of the 20th century, more immigrants and Southerners moved to the neighborhood to work at the shipyard and the area's factories. In the 1920s, swampy land was drained to build what would become Philadelphia International Airport.

The Eastwick neighborhood underwent dramatic change from the 1950s through the 1970s, when Philadelphia's Urban Renewal program—the largest of its kind in the nation—forced the displacement of 10,000 residents. Claiming the land under eminent domain due to alleged “blight,” the city's Redevelopment Authority sought to redevelop 3,000 acres to extend I-95, expand the airport, and build a sewage plant. Residents were promised the same or better-quality homes as their names were removed from deeds and the city bought out the properties for less than their value. The newly developed homes were built on improperly filled land, resulting in resident health disparities and structural problems made worse by regular flooding.¹ Panelists heard that many residents were not able to afford the new homes and only 4,200 of the proposed 12,500 units were built.² During this same era, two major landfills were approved to be built in the area, including the 65-acre Clearview site adjacent to today's residential homes.³

¹ Catalina Jaramillo, “How Philadelphia built a neighborhood on toxic soil,” WHYY, October 14, 2019, <https://whyy.org/articles/how-philadelphia-built-a-neighborhood-on-toxic-soil/>.

² “Lower Southwest District Plan,” Philadelphia City Planning Commission, City of Philadelphia, 2016.

³ Bernard Brown, “Eastwick residents work with the EPA to remediate the toxic legacy of a former landfill,” Grid Magazine, April 23 2023, <https://gridphilly.com/blog-home/2023/04/03/eastwick-residents-work-with-the-epa-to-remediate-the-toxic-legacy-of-a-former-landfill/>.

In the intervening years, Eastwick has borne the weight of this history, including the landfill's environmental contamination, sinking homes and streets, property abandonment, and ongoing flooding. Residents reported suffering health problems because of exposure to toxic chemicals from both flooding and the landfill.

At the same time, once protective wetlands have been heavily impacted by progressive development of the area, diminishing the ability of the land to absorb and filter water, adding to the potentially catastrophic mix of flooding and storm runoff. In 1999, Hurricane Floyd trapped residents in several feet of water and left them sick from exposure to polluted water. Following that disaster, residents were offered buyouts from FEMA, but due to the condition that all people with contiguous rowhomes had to agree to move, just four households accepted the deal.⁴ In 2020, Tropical Storm Isaias wrought extensive destruction to the neighborhood, with floodwaters rising as high as six feet inside some homes in the "Planet Streets" area closest to Cobbs Creek (see map on page 6). Approximately 300 households were impacted by Tropical Storm Isaias.⁵

In 2001, the Clearview Landfill was declared a Superfund site and in recent years much of the land has been remediated but the process is ongoing.⁶ In the meantime, the U.S. Army Corps of Engineers (USACE) has commissioned a feasibility study for a levee to alleviate some of the flooding.⁷ Most recently, Eastwick United CDC was founded to revitalize the neighborhood and pursue restorative justice for its residents.

But these positive developments do not compensate for the numerous and complex challenges caused by decades of inaction. Moreover, the constant threat of environmental disaster looms over the community as climate change spurs more frequent, intense storms and flooding. Given the inevitability of future disasters, the CDC has sought solutions that not only keep residents safe and their community whole, but that also deliver a reparative outcome for Eastwick.

Today, Eastwick has a population of 12,810 residents, according to the US Census, with 3,032 people over the age of 60.⁸ In recent years, residents conceived of a plan that involves the "swap" of vacant city-owned property located on higher elevations within Eastwick in exchange for 300 flood-prone and sinking homes built in the late 20th century, with a goal of converting the vacated properties into a protective barrier or flood mitigation area, such as the creation of wetlands or open space, and moving the 300 households into new housing.

⁴ Catalina Jaramillo, "Kenyatta Johnson's new Eastwick task force to tackle buyout question," WHYY, August 20, 2020, <https://whyy.org/articles/kenyatta-johnsons-new-eastwick-task-force-to-tackle-buyout-question/>.

⁵ Sophia Schmidt, "An injustice: 2 years after Tropical Storm Isaias, Eastwick residents still recovering without federal aid," WHYY, November 17, 2022, <https://whyy.org/articles/philadelphia-eastwick-residents-without-federal-aid-2-years-after-tropical-storm-isaias/>.

⁶ Sophia Schmidt, "D.C. is sending \$30M to fast-track cleanup of toxic soil in Philly," WHYY, December 17, 2021, <https://whyy.org/articles/d-c-is-sending-30m-to-fast-track-cleanup-of-toxic-soil-in-philly/>.

⁷ U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates, <https://data.census.gov/table?q=19153&y=2021&tid=ACSST5Y2021.S0101>

⁸ "Eastwick Flood Risk Management Study Draft Integrated Feasibility Report and Environmental Assessment," Philadelphia District, U.S. Army Corps of Engineers, August 31, 2023, <https://www.nap.usace.army.mil/Missions/Civil-Works/Eastwick-Flood-Risk-Management-Study/>.

SCOPE



Panelists tour area near Clearview Landfill.

Eastwick United CDC and the Office of Sustainability looked to the panelists to explore the possibility of a land swap arrangement for 300 households in Eastwick, allowing those most impacted by flooding to move to safer and ideally similar housing at no additional cost to them.

The panelists were asked to assess the land swap concept and to explore the following questions:

1. What financial resources, both public and private, are available to finance the construction of the replacement housing and relocation of impacted residents?
2. What best building practices can be included in the construction of the replacement housing to mitigate flooding?
3. How can we utilize wetlands to create open green space while simultaneously providing recreational areas and flood mitigation?

4. Can an inter-community relocation process be developed that will make impacted residents whole?
5. What are the legal considerations, mechanisms, and best practices that can inform an equitable relocation process?

In touring the area, panelists visited the “Pepper Bowl,” including the shuttered George Wharton Pepper Middle School, which closed due to flooding during Hurricane Floyd in 1999. The site has been nicknamed the “Pepper Bowl” because the area has some of the lowest elevation levels in all of the Eastwick, with portions of the site and school below two feet elevation.⁹ On foot, they toured the “Planet Streets” area of housing development that is most impacted by Cobbs Creek and storm flooding, and the creekside area where the USACE is currently studying the feasibility of constructing a levee. They then walked by the nearby Eastwick Park and Eastwick Regional Playground, followed by the Clearview Landfill at 82nd Street and Angelo Place which is currently undergoing remediation by the EPA. From the bus they viewed the area of undeveloped land that is proposed for the land swap, located across the street from the John Heinz National Wildlife Refuge at the end of Lindbergh Blvd.

⁹ “Lower Eastwick Public Land Strategy: Planning for an Inclusive and Resilient Future in Eastwick,” Interface Studio Urban Design and Planning, 2019.

ASSESSMENT

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Panelists preparing for presentation.

The panel noted that a land swap, while feasible, is complicated by the fact that it is a novel concept in the City of Philadelphia. As such, the [Land Bank](#) and Philadelphia Housing Authority have no established procedures in place to guide or shape their approach to a land swap. They also noted that the term “land swap” was an oversimplification as the proposed arrangement would entail a complex, multi-step resettlement and redevelopment process moving 300 households from one geographic area of Eastwick to another, more elevated area nearby.

Project Goals

Any proposed solution for the Eastwick community would ideally meet its agreed-upon and stated objectives: improving safety, avoiding displacement for residents, supporting wholeness or restorative justice addressing the wrongs of the past, and safeguarding generational wealth from increasing flood risk. The panel evaluated the land swap concept according to those criteria, adding timeliness and feasibility as considerations to the list of criteria as important considerations.

Case Study: Isle de Jean Charles Resettlement

One of the closest parallels in recent history to the proposed Eastwick land swap is the Isle de Jean Charles Resettlement in Louisiana, facilitated by a \$48.3 million dollar Community Development Block Grant awarded in 2016 by the U.S. Department of Housing and Urban Development (HUD) through their Natural Disaster Resilience Competition.¹⁰ In this case, residents of an island heavily impacted by over a dozen hurricanes and two floods were relocated to a similar area of rural land, albeit 40 miles north in Terrebonne Parish, comprising about 120 houses once fully developed. Housing was constructed with eligible families participating in the resettlement receiving a forgivable mortgage loan, with one fifth of the loan forgiven each year over five years, provided the residents retained the property as their primary residence and obtained required insurance. The process took eight years from when the Natural Disaster Resilience Competition was announced in 2014 to construction beginning in 2020, to the first residents moving in during 2022.¹¹

Land Swap Evaluation and Timeline

The panel concurred with the sponsors that a land swap would offer residents improved physical safety, the ability to avoid displacement, and the ability to preserve the Eastwick community. If financed by public entities and philanthropic investors, it would also address the compounding injustices community members were subjected to in the decades since

¹⁰ Louisiana Office of Community Development, State of Louisiana, 2021, <https://isledejeancharles.la.gov/>.

¹¹ Kezia Setyawan, “After 10 years, Isle de Jean Charles residents will soon have a new place to call home,” WWNO - New Orleans Public Radio, February 17 2022, <https://www.wwno.org/coastal-desk/2022-02-17/isle-de-jean-charles-residents-expected-to-move/>.

the 1950s. At the same time, the panelists found that a land swap may be the most time consuming of potential solutions and the benefits to the community would not be realized for many years, leaving residents to endure unpleasant and potentially dangerous conditions in the meantime. At the time of this TAP, given the current financial resources and political will, the panel determined that a land swap would likely take up to 20 years or more from start to finish even if some phases and processes were conducted concurrently, and it would require somewhat complex technical solutions to create needed infrastructure and ensure sustainable and resilient development. Though they considered the land swap proposal generally feasible, panelists emphasized the complexity of required financial transactions and the need for cooperation between multiple players such as government agencies, developers, the residents, and other stakeholders for it to be completed. Based on the sponsor's objectives and some working assumptions about the plan (i.e., households from 300 single-family homes on approximately 23 acres are part of the land swap concept to relocate to approximately 25 usable acres for new residential development); the panelists outlined the planning process, financial process, and execution process involved.

Planning Process (2 years)

The panelists set out a series of steps for planning and launching the project. The community should first engage a planner to develop a conceptual plan for the proposed relocation area and gain the consensus of the residents to accept that plan. They would then hire an engineering firm to evaluate infrastructure needs such as site grading, streets, stormwater management, utilities such as electricity, gas, water, communications, and sidewalks. The next step would be to work with a sustainability expert to evaluate the feasibility of solar power, passive house construction, and the retention of open space or green infrastructure. Next, they would engage a construction firm to estimate project costs and then adjust the project specifications accordingly. At that point, the entitlement

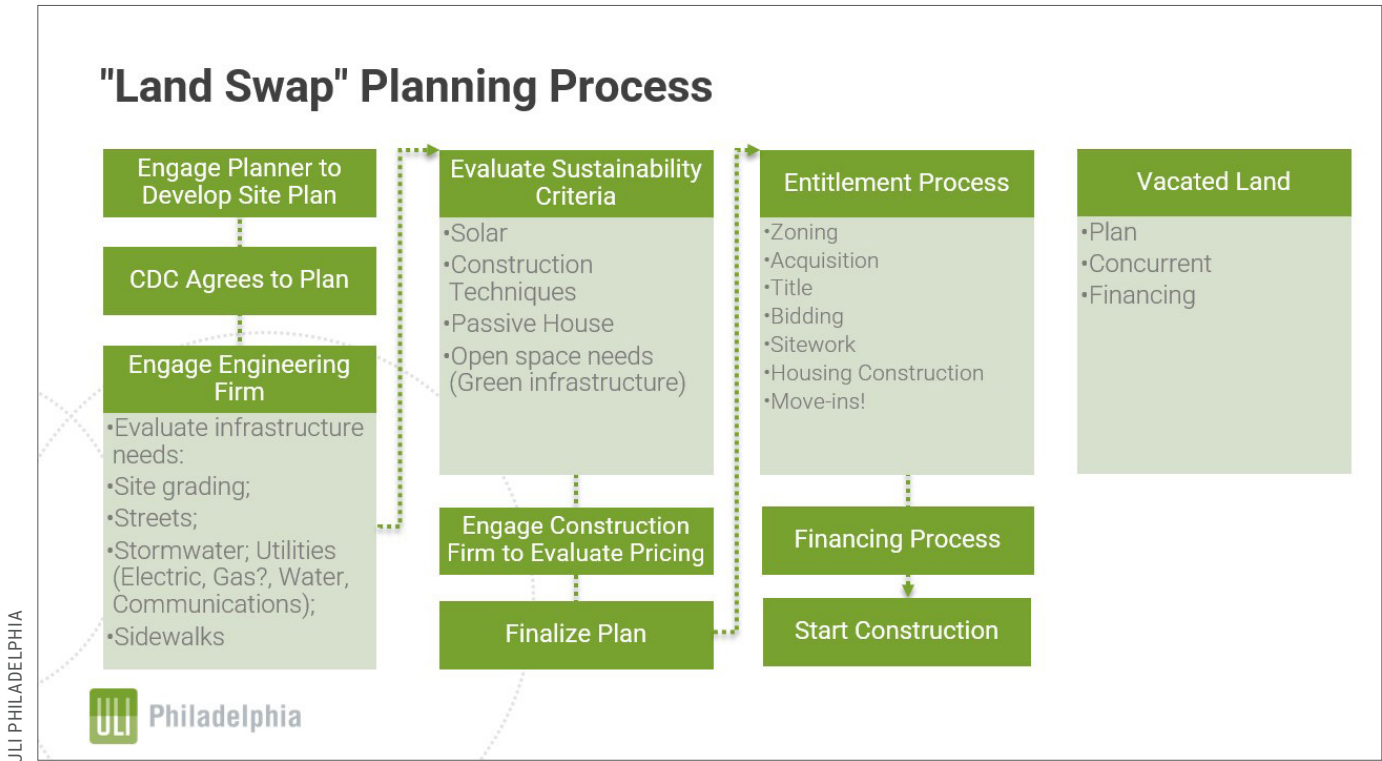
process (see Execution Process section on page 14) could begin. The community could then focus on the financing process (see Financing Process section below), followed by construction of new housing. As residents are relocated to new housing, a similar process would be initiated for the newly vacant land, whether it is turned into wetlands, used for other flood mitigation measures, or adapted for other functions. At this time, agreements would also be drafted and executed for management of the vacant land.

Financing Process (15 years)

The financing process can take some time, potentially up to 15 years, from the point of developing a conceptual plan, which could take up to two years, to securing the funding needed prior to construction. With a conceptual plan in hand, the community could approach potential funders to assess available funding opportunities and requirements. As the plan is refined (based on feedback from discussions with potential funders and evolving community needs), the community could work to identify additional funding sources and secure funding agreements. Management of the financing could be administered by the City of Philadelphia and/or the CDC. Potential funding sources could include both public sector (city, state, and federal agencies) and private funders (see "Potential Funding Sources" section starting on page 16). It is important to note that each funding source will have its own application timeline, qualifications, and spending requirements that will need to be aligned to meet the goals of the conceptual plan.

A project that is designed to include multiple benefits for the community (e.g., flood mitigation, economic resilience, transportation improvements, recreational opportunities, energy resilience, etc.) would likely attract and be eligible for more funding opportunities. However, this requires greater coordination amongst all relevant stakeholders to ensure there is no duplication of benefits/funds, and would likely take more time than traditional project financing.

"Land Swap" Planning Process



Landswap timeframe overview.

Evaluation

Options	Safety	Avoid Displacement	Wholeness	Time	COMPLEXITY		
					Financial	Technical	Cooperation
LANDSWAP	●	●	●	up to ~ 20 yrs.	○	◐	○
LEVEE	◐	●	●	~ 4 - 10 yrs.	◐	●	◐
BUYOUT	●	○	◐	~ 5 yrs.	◐	●	◐
BUYOUT NAVY YARD OR OTHER	●	○ ◐	◐	~ 10+ yrs.	○	◐	○

● Good ◐ Fair ○ Poor



ULI PHILADELPHIA

Evaluation of land swap and alternatives.

Funding resources from the federal government take time to actually “hit the streets,” due to the review processes involved in grant administration. For example, Philadelphia allocated funding from the Department of Housing and Urban Development (HUD), as part of the Community Development Block Grant-Disaster Recovery (CDBG-DR) for Hurricane Ida, which occurred in late 2021. As part of this funding, the city must submit an Action Plan, due in March 2023, to HUD for approval, before any funding can be released. Funding from the private sector would require coordination, but the revenue would be received faster.

Execution Process (5 years)

Execution of the land swap process would include a phased approach for residents vacating their current homes and moving into new homes. Also, given the fact that many of the homes are attached, it would be necessary to relocate all residents within that block of homes before demolition and restoration/redevelopment work could begin. This would not occur until all infrastructure has been installed to supply water, sewer, power, and other utilities to those new homes. Depending upon availability of funding and willingness of the residents, it may be possible to relocate them to temporary housing to get them out of harms way until the new homes can be completed, but that will require significant resources and coordination. As the residents move into their new homes, demolition of the existing homes and restoration or redevelopment of the land formerly occupied by the residents (i.e., into wetlands or other open space) could begin. This could be undertaken in a phased approach, depending upon funding availability and requirements.

The timing and logistics for when the restoration or redevelopment work of the land formerly occupied by the residents may also be dictated by the source of funding for this work and any requirements of that source. Most likely, the work would not commence until all residents have been relocated, but it may be possible to commence some of the work in a phased approach as mentioned above. Again, a phased approach could require significant coordination.

The Whole Picture

The panel found that the land swap concept presented both significant opportunities and considerable challenges for the community of Eastwick. As proposed, it is the alternative that would allow the community to remain whole, ensure a more resilient future, secure its investments in real estate, and allow opportunities for accumulation and preservation of household wealth to be passed onto future generations. Constructing new housing on higher ground would allow the community to include flood and storm mitigation measures and stay safer in the face of environmental hazards.

On the other hand, the land swap would not be a quick or complete fix for the concerns of Eastwick. The panel pointed out that the community should address additional considerations such as the parcel size for each home. For example, if residents want equivalent size and style of housing, would that be possible on the new site? Even living on higher ground, residents would still be subjected to the continued environmental threats of coastal flood risk and other health risks endemic to the neighborhood. While the new site is within the 500-year floodplain as opposed to the 100-year floodplain where the existing housing is located, it would still likely be affected by flooding of access routes that could isolate residents.

Alternatives to the Land Swap

The panel examined alternative solutions that could potentially meet the community’s goals in a simpler and more timely fashion, as well as their associated pros and cons. Some of these alternative solutions can be pursued concurrently or in tandem with the land swap.

Levee

The levee project currently under study by the USACE would stem flooding to the existing housing in Eastwick most affected by Cobbs Creek runover. The levee could improve safety for current residents. However, this study will not be completed for another year, and with construction slated to take four to 10 years to complete, it would not alone



View of Clearview Landfill.

solve all of the community's problems. The construction of the levee could also negatively impact quality of life for residents with additional noise pollution, dust, and other disruptions associated with the process; some community members have also voiced concerns about the levee's aesthetics.

Buyout

A buyout arrangement for the 300 impacted homes, subsidized by FEMA or another federal agency, could potentially give residents a faster means of relocating to a safer home and/or neighborhood of their choosing, likely within five years. This would be the least technically challenging of the options presented. However, given changing market value and interest rates, a buyout could be a financially riskier proposition for some residents and

it would require a highly personal decision that reflects individual family needs, priorities, and finances. It would also require somewhat complex coordination and collaboration and would require the agreement of all homeowners within a contiguous set of homes.¹² With no guarantee of residents moving together, it likely would not allow residents to retain their sense of community.

Buyout with Relocation to Another Neighborhood

The panelists also considered a federal agency buyout coordinated in tandem with an optional relocation of residents to housing in a different, safer neighborhood. This arrangement could help keep the community whole (if there was an agreement to move en masse), but it would require leaving Eastwick, which for some community members could be a nonstarter. It could leave residents with changed quality of life—for example, if there were fewer community amenities in the new neighborhood—or dissimilar style or size homes. This alternative, which could take a decade or more to complete, requires complex financial and cooperative processes between agencies and would require the agreement of all homeowners within a contiguous set of homes. With no previous discussion about this possibility, it would also require more in-depth conversation among community members.



Photo of 7800 Saturn Place street sign, highlighting strong neighborhood identity.

¹² Pennsylvania requires the agreement of all homeowners within a contiguous set of homes, such as rowhomes, for buyouts. Otherwise, if the buyouts were patchwork, then the site reuse would not be feasible and some residents would still be at risk.

RECOMMENDATIONS

The panel offered its recommendations to the Eastwick community for refining the land swap plan. These recommendations included best practices for implementation, potential funding sources, and specific project elements that would be attractive to prospective financial partners.

Land Swap Best Practices

Panelists emphasized that a land swap would require a collaborative approach between the public and private sectors. The community has already built important relationships with the City of Philadelphia's Office of Sustainability, Drexel University, and other institutions. Ideally, the community would expand its outreach to partner with nonprofits, developers, and philanthropic organizations while working with all levels of government for funding, implementation, and community support. Other key stakeholders to engage include the Heinz Wildlife Refuge, Philadelphia Housing Development Corporation, FEMA, City of Philadelphia's Office of Transportation, Infrastructure and Sustainability, Philadelphia Water Department (PWD), and the Philadelphia Redevelopment Authority. Strong partnerships with these organizations and others could enable concurrent planning efforts and help speed the timeline to completion.

Project Elements to Attract Funding

In order to draw the attention of funders, the community should first clearly define and develop a conceptual plan that meets the communities' core values – safety, avoided displacement of residents, community wholeness, protection of generational wealth - and align this plan with potential funding opportunities and requirements. The project would be both transformative for the neighborhood and its residents, and it would also administer some level of environmental and restorative justice to those that have been harmed by past events. Emphasizing these aspects will help bring

investors on-board. Likewise, using additional city-owned parcels of undeveloped land to bring in adjacent commercial development could help make a deal more attractive to potential investors.

Potential Funding Resources

There are several potential funding resources that may be available for project implementation from both the public and private sectors. The following list of public and private agencies and organizations can potentially provide funding and/or other resources for project implementation.

Public

City of Philadelphia

- Philadelphia Industrial Development Corporation (PIDC)
- Office of Community Empowerment and Opportunity (CEO)
- Philadelphia Housing Development Corporation (PHCD)

The Commonwealth of Pennsylvania

- Department of Community and Economic Development (DCED)
- Redevelopment Assistance Capital Program (RACP)
- Pennsylvania Housing Finance Agency (PHFA)

Federal Resources

- The Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA): The following link provides some specific resources for both legislative acts. <https://www.whitehouse.gov/build/>
- BIL Funding Opportunities: highlights funding opportunities that communities can apply for throughout 2023. <https://www.whitehouse.gov/build/resources/nofos-to-know/>

- BIL Guidebook: provides a roadmap to the funding available under BIL and explains how much funding is available at the program level. <https://www.whitehouse.gov/wp-content/uploads/2022/05/BUILDING-A-BETTER-AMERICA-V2.pdf>
- BIL Technical Assistance Guide: highlights programs that help communities navigate programs and resources that can help them deliver infrastructure projects. https://www.whitehouse.gov/wp-content/uploads/2022/05/Infrastructure-Technical-Assistance-Guide_FINAL2.pdf
- Equitable Infrastructure Workforce Development Guide: provides an overview of the federal funding resources to support equitable workforce development. <https://www.whitehouse.gov/build/resources/equitable-infrastructure-workforce/>
- IRA Guidebook: provides an overview of the clean energy, climate mitigation and resilience, agriculture, and conservation-related tax incentives and investment programs, including who is eligible to apply for funding and for what activities. <https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf>
- available to work directly with communities as they build upon local assets to co-design and advance infrastructure projects that address critical social, economic, environmental, and mobility needs. <https://www.hud.gov/grants>.
- Environmental Protection Agency (EPA): has several grant programs and opportunities that seek to improve the environment, address brownfield development, environmental outreach, and environmental justice. <https://www.epa.gov/grants>.
- U.S. Economic Development Administration (EDA): has several grant programs to assist with economic development planning and projects, workforce development, etc. to improve community economic resilience and competitiveness. <https://www.eda.gov/funding>.
- Department of Transportation (DOT): has several grant programs for the improvement of multi-modal transportation infrastructure to reconnect communities. <https://www.transportation.gov/grants>.
- Department of Energy (DOE): supports several grant, loan and financing programs for energy projects, such as energy efficiency and renewables. <https://www.energy.gov/funding-financing>.

Federal Agencies

In addition to the above information about BIL and IRA and the associated programs, several federal agencies may have specific programs and grants that can be potential sources of funding and other resources.

- Federal Emergency Management Agency (FEMA): offers funding opportunities for hazard mitigation assistance and reducing risks from disasters and natural hazards. <https://www.fema.gov/grants>.
- Department of Housing and Urban Development (HUD): offers several funding opportunities. For example, CDBG-DR funding can be used for planning, economic development, and mitigation. Additionally, the Thriving Communities Program provides hands-on planning support and access to a diverse set of technical assistance providers

Private

- Infrastructure Owners: Utilities such as PWD, PECO (electric), and Philadelphia Gas Works
- Private developers who may interested in participating in the project would provide equity and access to the debt markets
- Private Foundations (e.g. William Penn Foundation)
- Grants
- Corporations
- Individual donors
- Tax credits
- Bank financing through the Community Reinvestment Act



ULI PHILADELPHIA

View of attached rowhomes in the Planet Streets area. In PA, all owners in a contiguous set of rowhomes would need to agree to buyouts.

- Environmental remediation from corporate settlements due to pollution/contamination

Non-Financial Resources

- Technical assistance
- In-kind donations such as pro bono professional services

In addition to the above, the following are additional resources that can assist in sourcing funding opportunities:

- Recovery and Resilience Resource Library: FEMA developed the Recovery and Resilience Resource Library in collaboration with federal interagency partners to navigate the numerous programs

available to the United States and its territories to help recover from a disaster. <https://www.fema.gov/emergency-managers/practitioners/recovery-resilience-resource-library>

- Roadmap to Federal Resources for Disaster Recovery: The Roadmap to Federal Resources for Disaster Recovery is a federal interagency collaborative effort to provide a tool for state, local, tribal, and territorial (SLTT) partners navigating the complex post-disaster funding landscape. <https://www.fema.gov/emergency-managers/practitioners/roadmap-resource-library-form>

Immediate Solutions

In the meantime, the panel suggested that the Eastwick community and the city implement some immediate practices to shore up safety for residents. These include:

Community Flood and Disaster Preparation

- Consulting with disaster experts about indoor spatial arrangements to ensure safety and reduce destruction and property damage inside homes during a flood.
- Obtaining a government subsidy, public grant, or private funding for collective community flood insurance, which is currently a concern for many in the neighborhood.
- Help residents navigate the trauma of the past and address their well-being with behavioral supports and mental and physical health counseling.

City Flood and Disaster Preparation

- Implementing a flood warning system so residents can have advance notice of impending flooding.
- Providing sandbags or inflatable flood barriers that residents can use to reduce damage during a flood.
- Identifying or building flood-safe parking lots to avoid damage to cars, with shuttle service for residents.
- Developing evacuation plans and emergency kits for distribution to all residents.

For Further Exploration

The panel also offered some additional ideas for the community to consider:

Resident Relocation Program Within Eastwick

- Establishing a program to give residents in the most highly flooded areas the “first chance” (a.k.a. right of first refusal) to purchase or move to safer neighborhood properties as they come on the market.

Regional Flood Management District

- Working with other adjacent flood-prone communities and their public agencies in Philadelphia and nearby Delaware County to mitigate flooding risk upstream and downstream. The community has already begun to build these alliances, but further formalizing them could help coordinate disaster prevention and response.

Community Economic Opportunities

- Looking for ways to leverage community assets such as natural elements, open land, and recreational offerings to draw visitors to the neighborhood and area businesses, channeling that money back into economic benefit for the community and its residents.

Philanthropic Partnership

- Cultivating relationships with philanthropic organizations to support the needs of the community, either through technical assistance or financial support.

CONCLUSION



ULI PHILADELPHIA

Vacant and flood-prone George Wharton Pepper Middle School.

The community of Eastwick has endured enough hardship over the last 75 years, and the time has come to put solutions into action. The panel agreed that any solutions were long overdue. Panelists were mindful that community members would want to see change sooner than later, and ideally within their lifetimes.

The proposed land swap arrangement best suits the community's goals and criteria for action. At the same time, of all the solutions explored, it requires the most time, cross-sector and cross-agency collaboration, and coordination to overcome the technical and financial challenges it poses. With best practices including relationship building among the involved agencies, project elements to attract more funding, and well-managed timelines, the solution is feasible, if complicated. The panel sought to manage community expectations by establishing that the process could take up to twenty years to complete.

In the meantime, the panel found that in the short-term, the city and community could put into place some flood-safety measures, implement counseling services to help already-impacted residents, and seek out a creative approach to making flood insurance more widely available to stem further destruction and loss in Eastwick. Developing a resident relocation program would give residents more choices and control over their living arrangements in the much nearer future. Finally, the community could think about closer coordination with other civic leaders upstream and downstream to help address common problems, seek out philanthropic support to sustain any of the proposed solutions, and work to attract more visitors to not only bring money into the local economy, but to amplify public awareness about Eastwick's tragic history as well as the neighborhood's enduring appeal.

PANELISTS

Co-Chair: Charnelle Hicks,

CHPLanning

Charnelle Hicks has 30 years of experience in comprehensive and regional planning, economic development, and public outreach. Charnelle has management consulting experience in business organizational development and frequently shares her professional knowledge on expert conference panels. In 2016, she gave a Keynote Address to the City Planning and Urban Design Conference ([CPUD](#)) in Istanbul, Turkey and was recognized as a Philadelphia Minority Business Leader by the [Philadelphia Business Journal](#). CHPlanning specializes in transportation and infrastructure, land use and environment, design and engagement, and management and technology solutions to complex multidisciplinary problems for social and built environments.

Co-Chair: Gina Tonn,

Verdantas

An experienced researcher, project manager, and engineer with expertise in natural hazards, resilient infrastructure and communities, and water resources, Gina Tonn's interdisciplinary background includes experience in the private sector, academia, and state government. Gina's research interests include resilience of communities and infrastructure systems, climate change and sea level rise adaptation, natural hazards, and sustainable water resources management. As an IGERT Water, Climate, and Health fellow at Johns Hopkins University, she participated in interdisciplinary research on climate change risks. At the Wharton Risk Center, she researched multiple facets of flood risk and the resilience of infrastructure systems. Gina has extensive professional experience in Water Resources and Environmental Engineering including

work in consulting and state government, including project management; floodplain management and flood mitigation; hydrologic and hydraulic (H&H) modeling; stormwater management design and monitoring; water quality monitoring; cost benefit analysis; sustainability; environmental risk management; and stakeholder outreach.

Nora Bergsten,

Cecil Baker + Partners Architects

An associate at Cecil Baker + Partners, Nora Bergsten has over 10 years of experience serving a wide range of institutional, not-for-profit, and private clients both in the design of new buildings and in renovations to existing structures. Nora is dedicated to bringing the highest level of service to each client. She especially enjoys working with clients to understand their goals and leading them through the design process to create beautiful spaces. Nora's design sensibility aims to bring simple solutions to complex problems and she is committed to the firm's unwavering attention to detail. Originally from Central Pennsylvania, Nora currently lives with her husband and two young children in Center City Philadelphia. She attended Haverford College as an undergraduate and received her Master's in Architecture from Yale University in 2005. Nora is a Registered Architect in the Commonwealth of Pennsylvania and a LEED Accredited Professional.

Joanne Chen,

Center City District

As a researcher for Center City District in Philadelphia, Joanne Chen Incorporated new indicators for the economy and sustainability in published reports, demonstrating the recovery of the economy from the pandemic. She monitored the recovery of the city from the pandemic in aspects of housing, pedestrians, employment, and tax by exploring the compatibility and discrepancy of

multiple publicly accessible data sources. She has also analyzed complex data sets about domestic migration to verify narratives of Philadelphia's population shift from the media in comparison to other cities and assisted with producing data-driven communication pieces. Chen received her BS in horticulture and Landscape Architecture from National Taiwan University and her master's degree in City and Regional Planning from Rutgers University.

Dan Garofalo,

Dan Garofalo Architects

An accredited LEED architect, Dan Garofalo has overseen and planned sustainability projects for public sector, higher education, and non-profit organizations to improve lives and promote equity. Garofalo's experience in higher education includes over 20 years as a Senior Facilities Planner, Sustainability Director, and University Architect. After seven years, Garofalo transitioned his role at Penn to Sustainability Director and managed the university's environmental efforts, authoring and implementing Penn's Climate Action Plan. Prior to his work in higher education, Garofalo was a consulting architect for the design firms the Hillier Group, Jacobs/Wyper Architects, and Becker Winston Architects, where his work involved leading construction and design projects for a variety of commercial and institutional clients. He currently serves as Vice-Chair of the City of Philadelphia Civic Design Review Committee, leading monthly assessments of major development projects.

Wynne Kwan,

FEMA Region 3

A Region III Community Planning and Capacity Building Coordinator, Wynne Kwan specializes in economic and industrial strategy development, master planning, CEQA and NEPA documentation, research and analysis, policy analysis, community planning, English as a second language instruction, FEMA emergency response, and pre-disaster/hazard mitigation planning. She received her B.S. in Urban Planning and Architecture from Massachusetts Institute of Technology and her M.S. in Urban Planning from Columbia University.

David Mercuris,

The Goldenberg Group

David Mercuris has over thirty years of professional experience in real estate and consumer product management. Mercuris has been with The Goldenberg Group since 2003, where his primary responsibilities are for the residential division of Goldenberg Development. In addition to his development responsibilities, he manages marketing, corporate communications, and public relations. Notable residential projects include The Ayer Condominium and The Carriage Homes at Haverford Reserve. Prior to joining The Goldenberg Group, Mercuris served as Vice President for Corporate Strategic Planning, Vice President for Finance, and Absolute Vodka Brand Global Finance at Seagram Company Ltd. Mercuris has also worked for Moody's Investors Service and The Campbell Soup Company. Mercuris earned a B.S. from the University of California at Davis and an MBA in Finance and Accounting from Columbia University. He is a member of the Urban Land Institute, International Council of Shopping Centers, and the Delaware and Montgomery County Home Builders Associations.

James Mogan,

Reed Smith LLP

Jim Mogan is the Real Estate Practice Group Leader for the Philadelphia office of Reed Smith and represents investors, developers, and owners in the acquisition, development, construction, financing, and leasing of all types of commercial real estate assets with a particular focus on student housing communities and healthcare facilities, including medical office buildings and senior living communities. Mogan has nearly 25 years' experience as a trusted advisor counseling clients in transactions involving student housing communities, healthcare, and senior living facilities, medical office buildings, multifamily apartment projects, energy projects, office buildings, shopping centers, hotels, and manufacturing and industrial facilities. Mogan also has significant experience in a variety of corporate transactions, including the structuring and formation of joint ventures and partnerships.

Vaughn Ross,**Rvesta**

The founder and principal of Rvesta, Vaughn Ross balances non-conventional thinking with lived experience as a government administrator to create a unique consultative approach. He served as a Deputy Chief of Staff to Philadelphia Mayor Jim Kenney from 2016-2021. In his time in the Mayor's Office, he oversaw a portfolio of departments focused on economic development including: the Department of Planning and Development; the Commerce Department; and the Office of Transportation, Infrastructure, and Sustainability. He also maintained and established relationships with a number of quasi-governmental, non-profit, and community organizations on behalf of his office.

Peter Zabierek,**Sugi Capital Management, Inc.**

Peter Zabierek co-founded Sugi in 2018. He is one of the firm's two portfolio managers. He also oversees the strategic development and day-to-day

management of the company's activities. Zabierek has 28 years of professional experience, including the last 20 working exclusively in the global REIT space. Prior to founding Sugi, he was the CEO of Presima, a global real estate investment manager that grew from \$500m to \$2.1b under his leadership from 2013 to 2018. From 2003 to 2013, he was Managing Director and Co-Head of Global Real Estate Securities at CenterSquare Investment Management, a subsidiary of BNY Mellon Asset Management. In that role, he launched and served as Senior Portfolio Manager for \$4.5b of global real estate securities and served on the firm's management committee. During his 10-year tenure there, the business grew from \$250m to \$7.0b. He has also held real estate investment roles at Morgan Stanley and Salomon Smith Barney in New York. Zabierek holds Masters' degrees in both business administration and civil engineering from the University of California at Berkeley. He is also a registered professional engineer and CFA® charterholder. He currently serves on the Advisory Board of Harlem Lacrosse in Philadelphia.

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AKRF

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Eastwick Friends and Neighbors Coalition

Eastwick United CDC

Eastwick Community Ambassadors

FEMA Region 3

Office of Emergency Management

Office of Transportation and Infrastructure Systems

Philadelphia City Planning Commission

Philadelphia Housing and Development Corporation

Philadelphia International Airport

Philadelphia Office of Sustainability

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