2023

ADU Design Competition

for Architectural Students

Presented By:







MONTCLAIR GATEWAY
TO AGING IN PLACE

Smart growth at the municipal level means casting a sober eye on community demographics. In our first-ring towns there are more modern elders than schoolchildren. All over our nation, communities are rethinking municipal priorities, especially with respect to housing.

The fact is that we are in the midst of a longevity revolution. The modern elder demographic, and those who will follow them, are living longer lives than the six generations that preceded them. One hundred and twenty years ago the average age expectancy was 58 years old. And now our financial advisors are telling us to plan for life expectancy into our 90s. Why does this matter? How has this new "age wave" impacted us, and our communities?

There is no question that the single-family home, which has remained the norm in suburbia, fails to address the needs of a population which is aging in place. Ever escalating real estate property taxes, the mainstay of NJ municipal income, are unendurable for modern elders living on fixed income. High costs of fuel and home repair introduce additional financial burdens.

Offering stability to older homeowners who wish to age in place is an unequivocal good for local populations- their buying power, volunteerism and collective wisdom enrich our communities.

The Accessory Dwelling Unit (ADU) housing alternative offers a new solution. Unlike developer-underwritten housing construction, ADUs bring gentle densification to our existing neighborhoods: i.e. homeowners own and develop ADUs on their own property; original streetscape is preserved; and municipal communities gain new tax revenue.

By legally collecting rent on the ADU, homeowners can offset property taxes. Modern elders can downsize into the ADU they built, rent their original dwelling, and even barter for services like snow clearing or garbage pick-up in exchange for rental adjustments. ADUs can also provide independent housing alternatives for adult children, aging relatives, our municipal workforce, or caregivers.

Because educating citizens about ADUs is important, AARP NJ and The Partners for Health Foundation awarded grants to Montclair Gateway to Aging in Place (mGAP) to organize an ADU design competition among current architectural students. Prize-winning designs were sited for a typical NJ single-family plot. Soon New Jersey will join California, State of Washington, Oregon, Minnesota, New York, and others by adopting a Statewide ADU Ordinance.

Competition Goals

The goals of our competition include:

- Educating the public, including municipal leaders
- Sensitizing our young architects to the housing needs of modern elders
- Reinforcing the idea that architects shape community, not merely build framed dwellings

By using the winning designs as proof of concept, we aim to stimulate dialogue with regional municipal leaders and give them reason to revisit current zoning requirements. Our design brief necessitated conformance to the property specifications of a real single-family parcel in our community, e.g. actual height limitations, set-backs, permeability, and privacy requirements.

Our design brief called for barrier-free, accessible, and environmentally sustainable designs. This requirement forced the architectural students to research these issues, and then incorporate architectural elements that attested to their understanding of the needs of modern elders.

Our design brief also advocated for gentle densification as a path to sustaining community. By showing real examples of an ADU in the context of an actual single family home, we also wanted to neutralize potential Nimbyism (Not in my backyard) within the neighborhood. We were aware that merely passing an ordinance would not be enough stimulation to acculturate our local population.

Of course, our overarching concern is the changing demographics of our community and, in the face of ever higher and higher property taxes, finding a way to help our modern elders remain in the community they have lived in for decades. Medical research has demonstrated that older citizens live longer and more meaningful lives when they retain ties to their doctors, houses of worship and local support systems. And, the grandparent economy is great for local business. So finding a way to help our modern elders remain in our Township has always been a major mission of mGAP. Community excitement for our exhibit of the winning designs in our local library was encouraging.

This Design Competition has been a rewarding and inspirational process – for our organization, for our competitors, and the many advisors and jurors who have contributed to its success. A special thanks goes to the Rearden family who graciously volunteered to share a survey of their property so that student designs had to adhere to real world specifications.

Awards Ceremony

Important work is being done at the State level and we were fortunate to welcome one of New Jersey's strongest advocates for ADU development, **Assemblywoman**Britnee Timberlake. Asw Timberlake has been a

champion of housing equity since she was founding Executive Director of a nonprofit affordable housing organization called the Essex Community Land Trust. And, her quest for more and better housing options for the citizens of NJ continues. She is



current sponsor of NJ A3584, a bill that would expand access to ADUs across New Jersey.

This past summer, mGAP was honored to receive two awards; one from The Partners for Health and another from AARP's Community Challenge Grant. Funding from both grants enabled mGAP to conduct the design competition with the goal of addressing the housing challenge for seniors who want to age in place. Sarah Mack, Manager of Outreach and Engagement represented the AARP New Jersey State office where



she is deeply entrenched in New Jersey local communities, working tirelessly to make NJ a lively, vibrant place for residents of all ages to live, work, and have fun. Sarah discussed Blueprints for Aging; how ADUs are changing the landscape for senior living.

Competition Jury

Siobhan Finlay - Architect

Siobhan is a product of the Montclair School System, herself a winner of the 2021 AARP-sponsored Houston Texas ADU Competition, and currently an architectural designer at Deborah Berke Partners.

Christina Kata - Regional Planning Association

Juror Christina Kata, born and raised in New Jersey, embodies emerging 21st century values. Having chosen not to own a car, she chose to live in Montclair for its access to mass transit. She is a passionate environmentalist and has a vision for where local decision-making now will lead to healthier communities in the future. Currently a Special Projects Associate at the Regional Planning

Association, Christina's special interest in buildability, accessibility, as well as sustainability added valuable insight into our jury process, that is, how applying good public policy principles at the design stage will yield better



livability for the entire community.

Kip Siebert - Contractor

Kip Siebert is well known to many homeowners in Essex County and beyond. He is founder and chief of the Heritage Home Design Corporation. He is known for his aesthetic sensibility, attention to detail, and keen eye for project buildability. Kip's extensive knowledge of inherent buildability was essential to our jury process.

Paul Sionas - Architect

Paul Sionas, licensed architect, licensed landscape architect, as well as a licensed planner, has actually been engaged to design an ADU for Joe and Doreen Reardon. Paul believes that architecture taps into



a passion for the workings of the community as a whole...not merely for its physical framework.

Ira Smith - Architect

Ira Smith is co-founder and principal of Smith Marron Architectural & Interiors LLC, adjunct professor, public speaker and published writer who uses his problem solving skills to inform and bring consensus to complex projects. He has special interest in historic preservation and adaptive reuse. He is currently using his considerable skills on the Montclair Lackawanna Redevelopment project.

Marina Rubina - Architect

Juror Marina Rubina, architect, has garnered Statewide attention for her pioneering work in designing and building ADUs, especially in the borough of Princeton. Marina's deep understanding of zoning ordinances and her philosophy that "cookie cutter solutions do not respond to unique communities and sites" yields exuberant and distinctive architecture.

Competition Winners

First Place Prize: The Lit Hearth

Bardh Maraj (CCNY)

Second Place Prize: The SwAy House

Miriam Perel (CCNY)

Third Place Prize: *The Calm Corner*

Endrit Sopa (CCNY)

Best in Category 1200 sq. ft.: *House of Openings* Louie Apostol (CCNY)

Best in Category 800 sq. ft.: Forever Here Evangelos Vasus (CCNY)

Best in Category 575 sq. ft.: On The Fence
Evan Ortiz, Sloan Aulgur, and Charles Perot Janson (MIT)



Prize winners from left to right: Bardh Maraj, Miriam Perel, Louie Apostol, Endrit Sopa, and Evangelos Vasus

Contents

First Prize: The Lit Hearth 6
Second Prize: The SwAy House
Third Prize: The Calm Corner
Best in Category, 1200 sq. ft.: The House of Openings · · · · · 12
Best in Category, 800 sq. ft.: Forever Here · · · · · · · · · · 14
Best in Category, 575 sq. ft.: On the Fence · · · · · · · · · 16
Community Response · · · · · · · · · · · · · · 18
Thank Yous · · · · · · · · · · · · · · · · · · ·
Our Sponsors · · · · · · · · · · · · · · · · · · ·
Competition Case Study · · · · · · · · · · · · 21

The Lit Hearth

presented to Bardh Maraj by Juror Christina Kata and Tony Schuman (Architect/Homeowner)



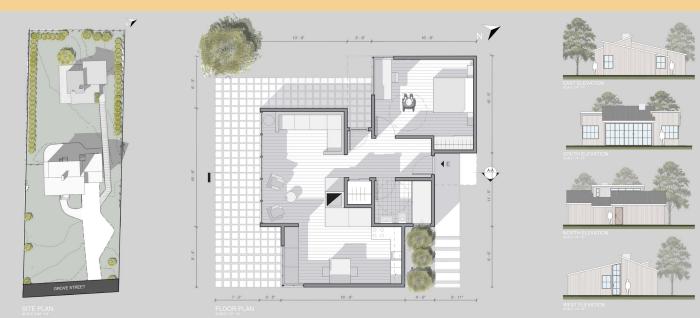
My name is Bardh, a 26-year-old architecture student currently enrolled at the Spitzer School after transferring from the University of Prishtina in Kosovo. My fascination with architecture, particularly in designing homes, stems from the belief that the spaces we inhabit significantly impact our lives. With a keen interest in creating practical yet aesthetically pleasing houses, I'm currently in my 5th year of studies and eagerly anticipating the opportunity to pursue this passion professionally.

The design of this house and the special attention to details, flow, and the light are attributed to the role of architecture in crafting living spaces in which materialistic meanings of "house" are transformed into the more abstract and comprehensive of "home". The beauty of the house, thus, is best highlighted through its use as people living in it gradually give meaning to special details that have been payed to the functionality and enjoyment of each corner and compartment of the house - in which process it becomes a home.

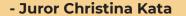
This ADU design in Montclair is all about combining indoor and outdoor areas seamlessly and making sure it's easy for everyone, including those with mobility challenges, to get around. In the heart of the design is a bedroom tucked in a quiet corner, offering a peaceful retreat. Right next to it, the living and kitchen areas are separated by a central fireplace, which makes each space special while allowing people to move around easily. The outdoor patio is like a bridge between the inside and the outside, giving the residents of this ADU their own "backyard" area. Large windows let lots of natural light and brings all that "wild" life inside.

Lastly, what makes this design stand out are the different level roofs. They let natural north light in and make each zone of this home feel different on the same floor level.

This place is well lit, easy to move around it, and welcoming for people of all ages and abilities.



This design is inspired by Frank
Lloyd Wright's Usonian House. It fits
in well with the style and scale of
the neighborhood and pays special
attention to details, flow and light.
Different level roofs and outdoor space
help create different living zones. The
pinwheel orientation allows for easy
flow and its position on the lot gives
occupants privacy while also giving
them the opportunity to look out at the
yard. The large windows enable natural
light to permeate the home.





Top: 3D Scale Model of *The Lit Hearth*. Bottom: Rendering of *The Lit Hearth*.

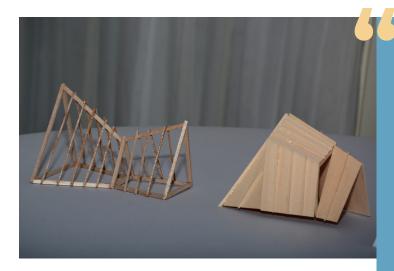


The SwAy House

presented to Miriam Perel by Juror Marina Rubina and Sarah Mack (AARP)



Miriam Perel is a fourth-year Bachelor of Architecture student at the Spitzer School of Architecture at the City College of New York. Born and raised in New York City, she enjoys studying the built environment around her through the lenses of art, history, and structure. She seeks to create designs that complement and enhance existing buildings and plans to pursue a career in historical preservation and adaptive reuse.



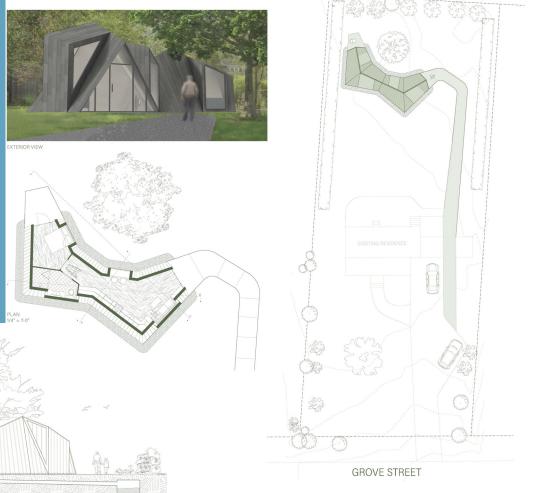
3D Scale Model of The SwAy House

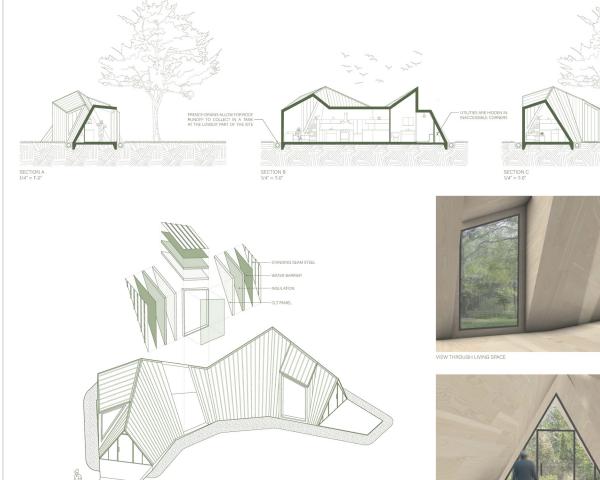
mGAP019 - 575 sq. ft

What is most important about this project is how to locate the ADU on the property to really, truly create a sense of privacy for people to live together. As we work on ADUs, we must distinguish them in the space; they are not a shed. This is a place that will be someone's home. This design artfully positions the ADU to the main house and makes it part of the landscape. New Jersey is in the middle of a housing crisis, and we often forget that we need housing that is beautiful, part of the landscape, and fun in order to be desirable... and this design accomplishes just that.

- Juror Marina Rubina

This design seeks to maximize the spatial advantages of the gable roof to create an airy and efficient space in a compact floor plan. The building's form abstracts the existing roof elements of the surrounding suburban homes to create the optimal configuration of living spaces. The use of dormers intersecting the A-Frame structure creates points of access for movement, light and air, and pockets of space to maximize the use of wall surfaces. The verticality of the form is used to create a feeling of loftiness in the compact space. The form curves away from the existing home on the lot, creating an enclosed yard space and a more private living experience for the residents of both homes. The ADU is accessible through the use of continuous spaces on a single level.





The Calm Corner

presented to Endrit Sopa by Juror Paul Sionas and Joe & Doreen Rearden



My name is Endrit Sopa, a 26-year-old with a passion for art and architecture. I started my educational journey at City College as a transfer student, and I'm now in my fourth year. I'm fully committed to my studies, and my goal is to design innovative and sustainable structures that will make a lasting impact in the world of art and design.



3D Scale Model of The Calm Corner

This is a very attractive building with a good logical floor plan. The bedroom is separated from the rest of the dwelling by a light filled connector, which introduces natural light right into the middle of the dwelling. The proposed vegetated, or green roof, helps the structure to visually blend into the site, while also absorbing rain water which minimizes runoff and controls flooding. The green roof also helps to minimize the perceived building height at the rear corner of this lot.

- Juror Paul Sionas

11

Mies van der Rohe famously said "Less is more." This 800 SF ADU design embodies this principle with a two-fold objective in mind. First, we aim to create a living space for an elderly couple that seamlessly integrates with their surroundings - a place where the indoors harmoniously merge with the outdoors, as this is where they predominantly spend their time. Secondly, we aspire to instill a sense of youthful vigor, ensuring that their transition to this new abode feels rejuvenating rather than disruptive in their twilight years.

To achieve this, we've incorporated various elements within the house. There's a dedicated workspace and areas for physical activities, all thoughtfully designed to enhance their overall well-being. Also a green roof on this ADU house is aesthetically pleasing and an efficient stormwater management solution. It absorbs rainwater, reducing runoff and potential flooding while also promoting sustainability by allowing for rainwater reuse. It's a space-efficient and eco-friendly addition to the house.









Third prize winner Endrit Sopa with Juror Paul Sionas and Montclair homeowners Joe & Doreen Rearden

House of Openings

presented to Louie Apostol by Juror Ira Smith and Dr. Gloria Essoka

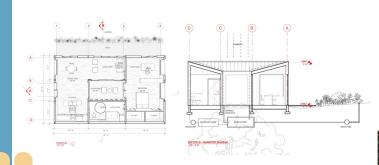


I'm Louie Apostol, a fourth-year student at The City College of New York's Spitzer School of Architecture. I am forward-thinking focusing on where architecture and sustainable designs are heading and hope to get involved in achieving climate goals. I am drawn to the creativity that exists in redesigning and improving the built environment. I was a member of the New Building Institute (NBI) Program, where I collaborated with other peers and professionals in the industry to advance my knowledge of high-performance buildings.

Given the competition goals of efficiency, accessibility and affordability, House of Openings fulfills all of these criteria and, as cleverly as possible, does more with less and does it with elegance. This clever design, originating from the ancient Greeks who built around an inner courtyard, maximizes light transmission from outside-to-in and inside-to-out. The green and humane design takes into account storm water management, an increasingly important value in our current climate, with storage of water held below ground and re-purposed for use within the home. This design also facilitates natural air flow for cooling the house and clean air exchange. Lastly, the modular structural rigor in form and space means framing and construction can proceed easily and economically.

- Juror Ira Smith





Top: Prize winner Louie Apostol with Juror Ira Smith and Dr. Gloria Essoka. Bottom: *House of Openings* floor plan and rainwater diagram.

This ADU is designed for the resident to connect to the landscape using different spatial techniques. It happens in the most extreme way in the center courtyard of the house where this outdoor space looks out over the garden and you get to feel like you're participating in a way that is beyond just observing it; you're immersed in it. The center courtyard also collects water runoff from the roof and stores it in a water storage tank. This grey water is then recycled for irrigation and for use in toilets. The central void operates as a light well, rainwater system, and outdoor living area. This inner light spreads outwards from the center and bathes every common area and circulation of the house in daylight. It needs to be functional first. The layout of the building was made to ensure that the flow and the connectivity between each area is working specifically for people with disabilities.

Making a strong connection to the garden was important all throughout the house. With that in mind, raw and primal materials are used and expressed in their true state, with the use of timber as a primary building material and standing seam metal roof for durability and maintainability. The same plywood clad walls within the interior are used throughout the home, including on the exterior where the plywood forms a minimalist surround of the courtyard.



Forever Here

presented to Evangelos Vasus by Juror Kip Siebert and Bob Russo



I'm Evangelos Vasos, a fourth-year architecture student at City College, and I'm excited to have recently received the "Best in Category" award for the mGAP ADU Design Contest. My academic journey has fueled my passion for pushing the boundaries of design and architecture, and this recognition strengthens my dedication to the field. As I near the end of my education, I look forward to applying my creativity and skills to real-world projects with a renewed sense of purpose and confidence. This award serves as a stepping stone to a promising future where I aspire to shape innovative and impactful architectural solutions.

Forever Here focuses on the creation of innovative additional dwelling units for elderly couples. This 800 sq. ft. ADU proposes a central design concept revolving around an open-concept living space anchored by a fireplace.

Design Inspiration:

A central hearth, the heart of my design, is symbolizing warmth, comfort, and connection. This inviting feature serves as the focal point for the open-concept living area, promoting social interaction and relaxation for elderly couples. The design should radiate a sense of harmony and togetherness.

Key Design Elements:

Flexibility: Adaptable spaces that can effortlessly accommodate the changing needs of elderly couples as they age. The layout can easily be reconfigured to suit various activities and preferences.

Accessibility: Prioritizes universal accessibility, ensuring that every aspect of the dwelling is easily navigable for individuals with varying mobility levels.

Fireplace-Centered Design: The central fireplace is a functional source of warmth but also a symbol of gathering and connection. It enhances the ambiance and the functionality of the living space.

Integration of Nature: Provides views and easy access to the rear yard creating a sense of tranquility and connection to the outdoors.





Prize winner Evangelos Vasos with Juror Kip Siebert and Bob Russo

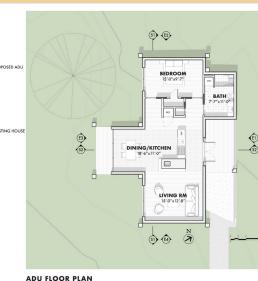
This version is a nice blend of fitting into the neighborhood and inventive creativity. They built a gable roofed structure so that it tends to match the houses – the Victorians and Colonials in the neighborhood – with a sloped roof. On the side facing the south, which is the sun side, they had more glass for a more contemporary look. The Inside has a very nice flow in a T formation that enables people with disabilities to get around more easily. And the centrally positioned fireplace adds an element of warmth.

- Juror Kip Siebert









S1-LONGITUDINAL S2-CROSS

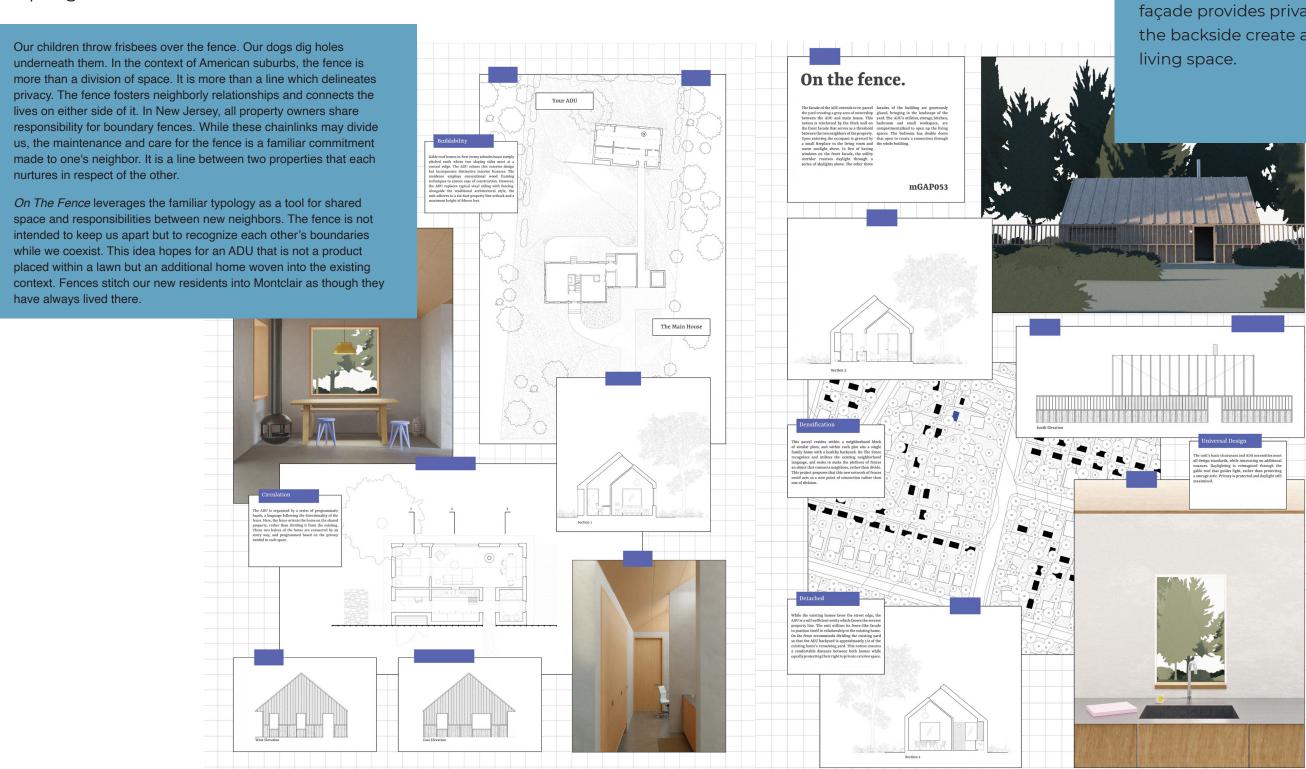






On The Fence

presented to MIT Team Evan Ortiz, Sloan Aulgur, and Charles Perot Janson by Juror Siobhan Finlay and mGAP Board Member Frank Millspaugh



We were impressed with the thoughtful and clever design which co-exists with the main house and creates both shared and private outdoor spaces. The gable roof massing is beautiful in its simplicity helping it to integrate seamlessly into the existing neighborhood. The primarily solid front façade provides privacy and windows along the backside create a bright and welcoming living space.

- Juror Siobhan Finlay

Community Response

90% agreed that these design(s) could fit into their neighborhood

"I would have liked a little house like this for my mother to age in place."

"Aging in place is such an important tool for maintaining a sense of community. I'm a big believer in ADUs to create gentle density in existing neighborhoods without much disruption."

"Interior layout cleverly considered"

"Design is so aesthetically pleasing that it will stay in my memory"

"Architect's description is clear and a succinct statement of architect's intentions"

"Architecture taps into a passion for the workings of the community as a whole... not merely for its physical framework."

- Juror Paul Sionas

"Seeing is believing. Having these models goes a long way to allay residents' concerns."

90% agreed these design(s) would serve their needs

"A design centered around the hearth uses hearth as dividing point between eating area and living area"

Architects build communities

"The designers of Fences characterize fences not so much as barriers but as threads that stitch together separate residentials properties in a patchwork quilt that constitutes and provides the warmth of the community."

"My mother-in-law would love to live in any of these designs. We want to keep our elders close to us at this point in our lives and in their lives."

Thank You

To Our mGAP Volunteers:

Gail Abramowitz, Charlie Bagli, Ellie Bagli, Cary Chevat, mGAP Director of Public mGAP Board Member Volunteer Volunteer Relations Susan Craig, Louella Dudley, Marilyn Graham, Jean Jimenez mGAP Secretary mGAP Board Member mGAP Board Member mGAP Board Member Alan Lippel, Ann Lippel, Frank Millspaugh, Carol Schlein, mGAP President mGAP VP for mGAP Director of Volunteer Development SmartSeniors/Smart Tech. **Project**

To Our Staff:

George Frole, Anya Maria Mayans, **Technical Coordinator** Research & Outreach Assistant

To Freedom By Design:

Dhwani Shah,	Dhruvi T. Rajpopat,
President	Former President

To Our Advisors:

Lori Price Abrams,	Richard Charreun,	Carmel Loughman,
Township of Montclair	Township of Montclair	Township of Montclair
Council Member	Planning Technician/ Zoning Officer	Planning Board Membe
D 1 D	T 0.1	

Doreen and Joe Rearden. Montclair Homeowners

Harald Cimear

BOD RUSSO,	10
Township of Montclair	Pro
Council Member	NJ
	Arc

iony Schuman,	
Professor Emeritus,	
NJIT Hillier College of	
Architecture and Design	

Margaret Seip,
Community Planner an
Former Project Director
of Trust for Public Land

Harold Simon,
Township of Montclair
Housing Commission, Retire
Executive Director of Nationa
Housing Institute

Darius Sollohub,	
Professor and Interim	
Chair, NJIT Hillier Colle	ge
of Architecture and	
Design	

Janice Talley, P.P., AICP, Township of Montclair Director of Planning & Community Development

Video:

Manager

Rick Gearhart.

Montclair TV 34 Station

Marcus Tung, Architect, Tungsten **Architects**

Peter Yacobellis. Former Township of Montclair Council Member

Musician:

Fred Phelps

Photographer:

Jennifer Markham

Our Sponsors





Representing our sponsoring organizations at the ADU Design Competition Awards Ceremony:

AARP NJ

The Partners for Health Foundation

Sarah Mack

Kathleen Smith

Gloria Essoka

Pam Scott

Competition Case Study

