Strategic Visioning Plan

May 2023

Future Restoration for Ukraine

Gensler

Irpin, a city of Heroes and Poets

Irpin is a city of heroes and poets. Four of these great minds and hearts share their vivid and lasting impressions of Irpin in these poems:

And again - a green reflection of Irpin, Birds' silver song above the deep blue waters,

Just like last year, foamy white clouds, Thoughtfully floating in golden heights..

Volodymyr Mykolayovych Sausyura Ukrainian writer, poet-lyricist, author of more than 40 poetry collections.

Oh palaces and frosty towers, it's difficult to tell excactly where i am - whether in childhood, or in a dream, whether in Irpin or in the magical kingdom Berendei.

Kostenko Lina Vasylivna Ukrainian poet of the 1960's, writer, dissident. Laureate of the Shevchenko Prize, the Antonovich Prize, and the Order of the Legion of Honor.

As trains are buzzing by Irpin, The moon shines above Mostycsche -It rushes with its blue shadow, And throws sparkling grain across the sky.

..trains hiss and creak And shudder to their wheels.

Malyshko Andriy Samiilovych

Ukrainian poet, translator, literary critic.

I came to Irpin, where the poets live They live here, their poems are constantly woven... In your silence, I would like to hear The secrets which calm my heart.

Dmytro Vysylovych Pavlychko

Ukrainian poet, translator, literary critic, publicist.

Table of Contents

1 Introduction	2 Irpin Yesterday	3 Irpin Today
5		6
Irpin Tomorrow		Conclusion
 Vision Statement Planning Principles Urban Design Strategies. Bridging to the Future Neighborhood Plan 15-minute City Precedents of Repurposing Economic Development Plan Priority Reconstruction Projects Ecology Plan River Edges Mobility Plan & Connectivity 	Gateway Plan Aligning with Ukraine Reconstruction Priorities & EU Standards Priorities & EU Standards Future Ready Refuge, Resilience & Community Safety Key Memorial Precedents Character Zones Heart Diagram	Next Steps Collaboration Partners

4

What we heard

Priorities of City Leaders Irpin City Survey



Introduction

STRATEGIC VISION PLAN

Preamble

Irpin, a garden city in the heart of Ukraine, offers a vibrant culture, history, and character to its residents and a respite for visitors. During the invasion in 2022, it became a site of fierce fighting, and despite suffering immense destruction, it was defended and liberated by its residents. Consequently, Irpin was awarded the title of Hero City and mobilized for rebuilding. Gensler partnered with the City of Irpin to help the leaders and residents to develop a vision for the future of the city.

Despite the widespread devastation wrought by the Russian invasion of 2022 – with immeasurable social, economic, infrastructure, and environmental impacts - the commitment of Ukraine to rebuild appears steadfast. Cities and regions, as well as the national government, are positioning for reconstruction efforts that will cost more than one trillion dollars. Urgent questions must be asked about the nature of this rebuilding and how it will be financed, prioritized, organized, and implemented.

Irpin is uniquely positioned to become a pilot planning initiative in Ukraine. Its size, history, proximity to Kyiv, and commitment to restoring the quality of life for its residents can be leveraged t odeliver a new, future-focused model of a Ukrainian city.

This document presents not a detailed plan for reconstruction, but a framework for the planning process, including approaches, priorities, physical characteristics and process proposed by the Gensler team. The document was developed in close coordination with the local government of Irpin, including the Mayor, Oleksandr Markushyn and Irpin Reconstruction Summit, headed by Volodimir Karpliuk. Our team also partnered with Irpin to conduct Gensler's City Pulse survey, which informed the process from the perspective of the residents. A network of global and local stakeholders and partners engaged in reviews and input to this document through a series of meetings and dialogues. The result is a framework which sets the stage for a robust replanning and rebuilding process as Irpin moves forward to a better future.

Develop Aspirational Vision: While recognizing the urgent nature of rebuilding, the work will be more than reconstruction plans. It will be an inspiring and optimistic vision for the future of Irpin.

Remain People Focused: The unspeakable human trauma and tragedies demand humane planning solutions that focus on livability, wellbeing, quality of life, social infrastructure, community, safety, and security. Planning solutions will prioritize education and health and promote equitable and growing prosperity.

Rethink Urban Planning: While discarding legacy Soviet planning patterns, the new plan will promote modernization and growth and prioritize walkability, integrated mobility, ecological restoration, mix of uses, density, and public space, with a focus on innovative housing typologies.

Balance Local and Regional Priorities: Local partners will help to identify efficient solutions that build on a region's inherent strengths and are based on realistic, implementable strategies.

Support Energy Transition: The new plan will champion low-carbon, energy-efficient solutions as a strategic priority in Irpin's commitment to a low-carbon future, Ukraine's security imperative for energy dependence, the country's vast low-carbon energy resources, and the scale of the reconstruction.

Prioritize Environmental Sustainability: Ecological restoration is an urgent priority and will be balanced by a longer-term focus on resilience and growth of green space and natural habitats.

Elevate to EU Standards: With Ukraine's ambition to join the EU, planning criteria will align with EU sustainability, building, and technology standards and encourage new methods of construction.

Empower Leaders: Given the uncertainties brought by the war - from the lack of resources to a lack of preparedness to rebuild communities - this planning process will support civic leaders who will lead their communities through the rebuilding processes.

Ensure Inclusive Process: Skillful engagement abilities will be employed to promote and facilitate participatory, inclusive dialogue with robust citizen engagement, local stakeholders, and global partners.

About Irpin

HЬ

For nearly 125 years, Irpin existed as a thriving multi-generational community, home to a diverse group of people. The city's numerous recreational facilities and parks make it well known and ideal vacation spot for residents of Kyiv and nearby cities. Irpin's industries also produce significant volumes of building materials and food for the nearby capital, operating as an appropriate counterbalance to the hustle and bustle of Kiyv.

Aided by redevelopment efforts which started just 6 years ago, the town had become a charming and picturesque retreat full of beautiful parks, plazas, and a vibrant culture. Prior to the war, significant investment in the modernization of the city's infrastructure had helped Irpin to achieve the ranking of 3rd safest city in Ukraine.

CITY OF PARKS, SPORTS, HEALTH, LIFE, BUSINESS AND CULTURE

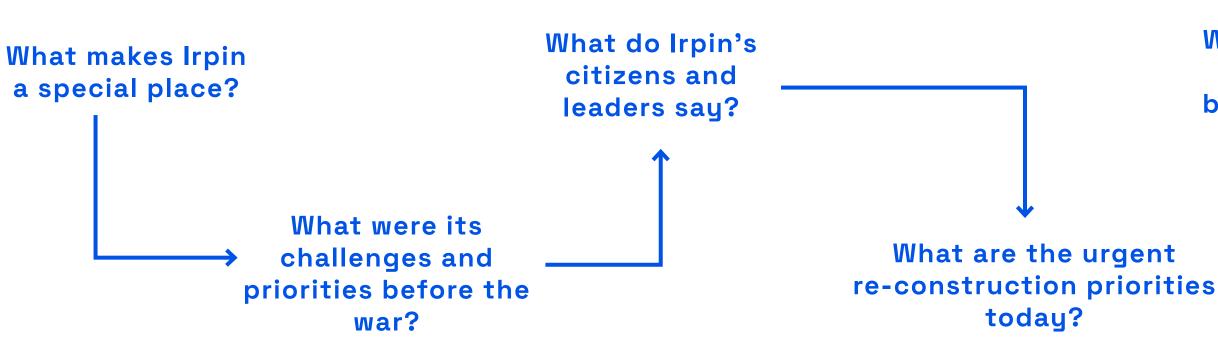
INTRODUCTION **Key Questions**

This project aims to help Irpin plan for a stronger, happier, and more resilient future. The goal is to work to bring back and enhance the quality of life, to honor the history and heroic spirit of its residents, and to provide a framework for long-term, sustainable economic growth. It is important for the city to become an embodiment of the vision of its people and leadership, while serving as an example that other cities in Ukraine can look to during the process of rebuilding.

To accomplish these goals, the planning team is listening to the voices of the residents while adhering to the reconstruction standards established by the city of Irpin, the Ukrainian government, and the planning principles of the European Union. The team will weave these inputs with innovative approaches to designing cities for the future.

Setting the right course for rebuilding Irpin - and other cities - requires a strategic master plan which will define and guide the path to their future.





What innovations should be adopted to build a better and more resilient future?

INTRODUCTION Planning for the future

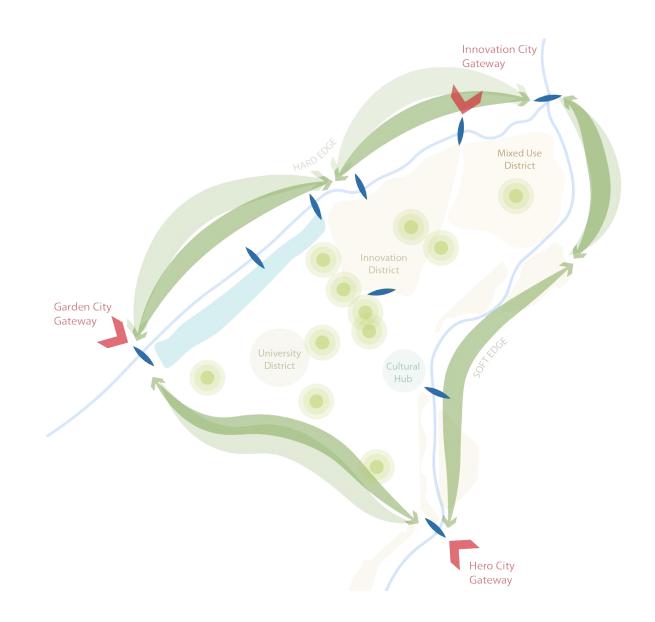
Irpin is a Garden City of Heroes and Poets. Positioned to be the rising Smart Heart of Ukraine, it will serve as a model of reconstruction for the Nation, towards a more resilient, livable and hopeful future.



INTRODUCTION Planning for the future

Irpin

- a city of **parks**, fostering wellbeing and sustainability
- a city of **bridges**, connecting communities to the future
- a city of **plazas** and monuments, remembering and honoring
- a city of **harmonious living**, erecting future-ready homes and communities
- a city of **growth** and prosperity, cultivating innovative industries
- a city of **resilience**, adapting and thriving in an unpredictable word



LEGEND



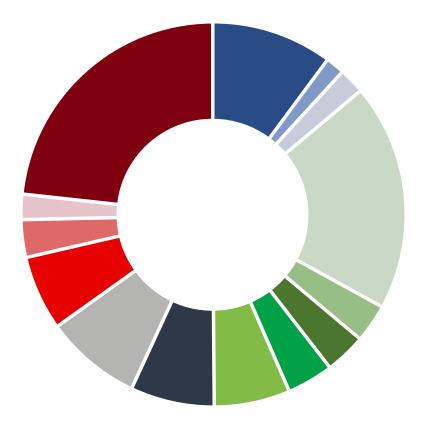
bridges nature's embrace parks and green spaces



Irpin Yesterday

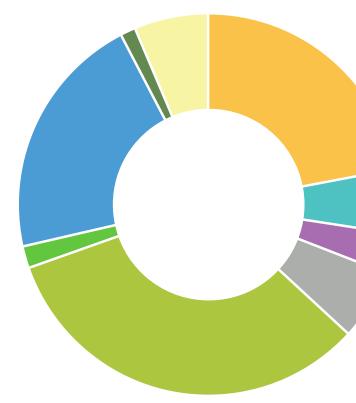
STRATEGIC VISION PLAN

IRPIN YESTERDAY Demographics and Economy



Employment Structure - 2018

Irpin boasted a diverse and robust local economy, with comparatively large shares of employment in hospitality, heavy industry, and higher education. The city's ecological assets were key to maintaining and expanding Irpin's reputation as a Garden City with high-quality wellness resorts and retreats. Higher education and healthcare institutions were leveraged to further diversify and expand clean industry through new smart technologies.



LEGEND

- Industry
- Construction
- Transport, warehouses, postal and courier activities
- Wholesale & retail trade, repair of motor vehicles and motorcycles, temporary accommodation & food organization
- Publishing, radio broadcasting, television, information & telecommunication
- Financial & insurance activities, real estate
- Professional, scientific and technical activities, activities in the field of administrative & auxiliary services

Public adm

Public administration & defense, compulsory social insurance

Education (general education, schools, kindergartens, preschools, etc...)

Universities

- Healthcare & provision, social assistance
- Recreational economy
- Arts, entertainment and recreation
- Other

LEGEND





Land use Distribution - 2018

The low-density character of the city resulted in a large share of the territory's urban land area dedicated to housing. Of particular note are the vital landscape, recreational, green, and agricultural lands that occupy over half of the total land area of the territory. This distribution was a key competitive advantage, and the city should retain this balance as it looks towards future growth and development.

- Nature reserve fund
- Water surfaces
- Agricultural lands
- Special territories
- Other

STRATEGIC VISION PLAN

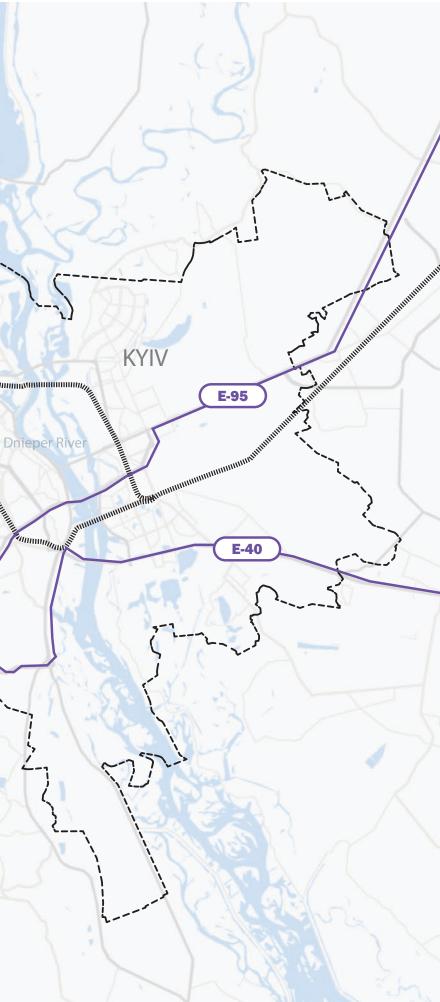
irpin yesterday Irpin Region



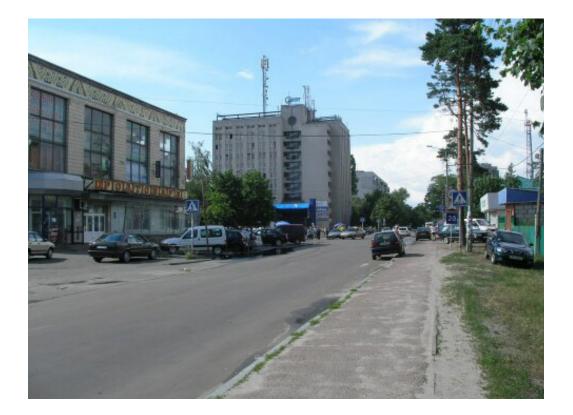
Irpin is a Hero City of Ukraine located in the western region of the greater Kyiv metropolitan region, between the banks of the Irpin and Bucha Rivers.

The city was founded in conjunction with railway construction in the late 1800s and continues to enjoy strong connectivity to the capital, as well as to the rest of Ukraine and Europe through regional rail and highway access. ntonov International Airport HOSTOMEL E-373 IRPIN **E-40** Sikorsky nternational Airpor 65. E-95

- ---- Regional Road Network
- Regional Railway
- _ _ Irpin Region

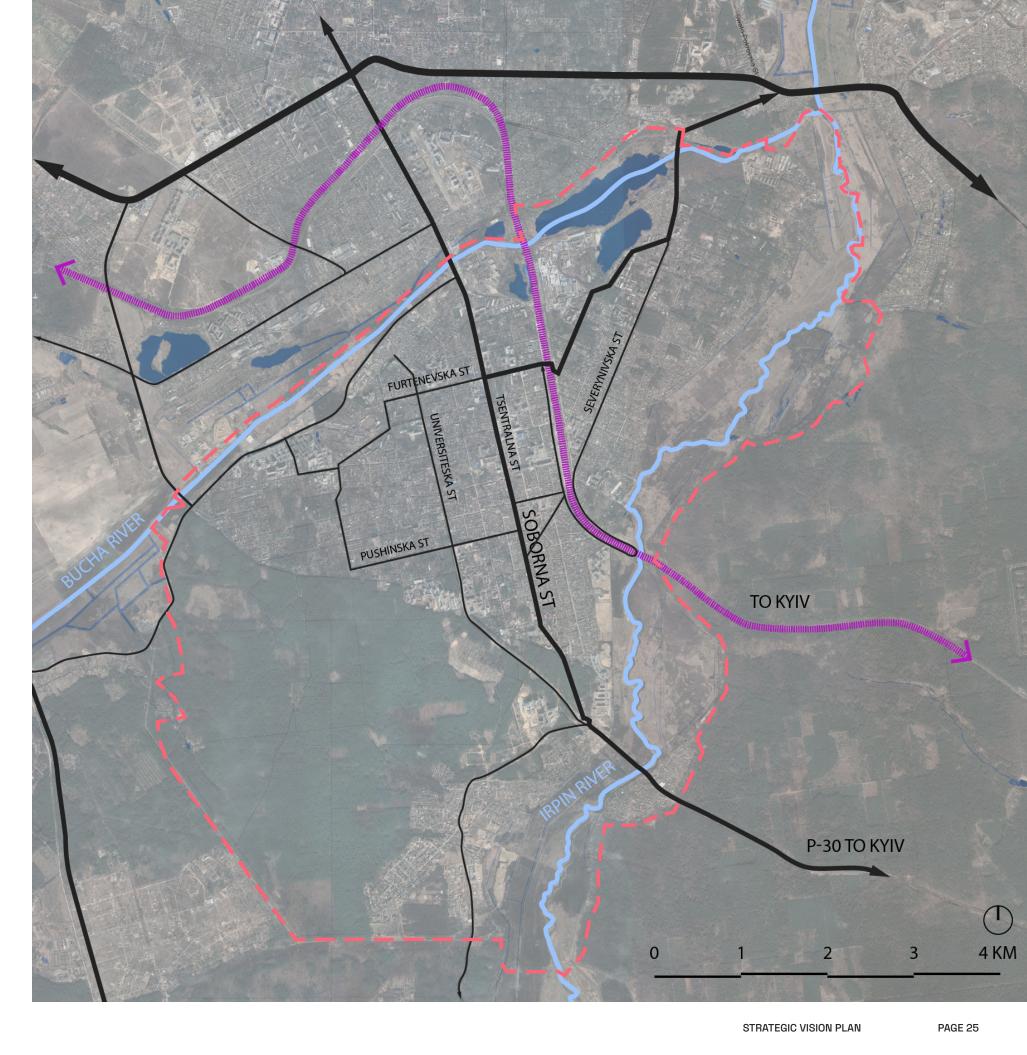


IRPIN YESTERDAY Major Street Network



Irpin government developed a strategic growth plan for the City in 2018. This plan identified significant network expansion of existing thoroughfares and prioritizes regional vehicular thoroughfares in lieu of local network of streets, for a more interconnected mobility system. Future roadway improvements could provide additional connections to neighboring municipalities and additional rail crossing could further integrate Irpin both internally and externally.

- Regional Thoroughfares
- Streets
- Regional Railway
- Irpin Region

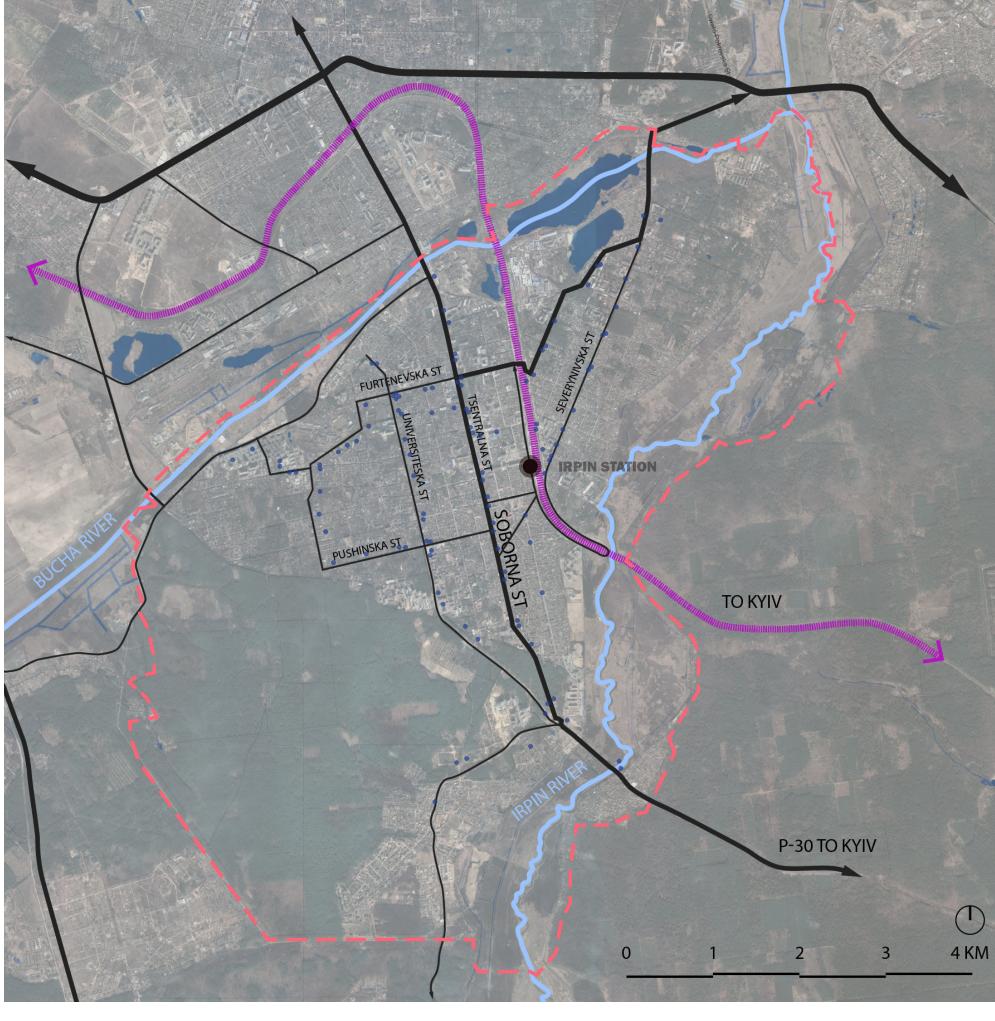


IRPIN YESTERDAY Public Transportation



Existing public transportation networks tend to follow the major thoroughfares throughout the city. Two sets of parallel couplets cluster bus, bicycle, and vehicular transportation. These networks offer opportunities for future densification through Transit-Oriented-Development (TOD).

- Rail / Bus Station
- Bus stops
- Regional Railway
- Irpin Region



IRPIN YESTERDAY

Irpin's land use is allocated primarily for residential, industrial, and agricultural purposes. The city's location near Kiev and its favorable climate and soil conditions make it a desirable location for development and economic activity.

Residential land use in Irpin consists of a mix of apartment complexes, private homes, and communal housing. Industrial land use in Irpin is primarily focused on small-scale manufacturing and service industries. The majority of industrial activity is located on the outskirts of the city, and these areas are primarily accessed via major highways and rail lines. Agricultural land use in Irpin is mainly focused on small-scale farming and vegetable production.

Open space
Residential (low scale)
Residential (mid scale)
Institutional
Education
Utilities
Industrial enterprises
Water surfaces



IRPIN YESTERDAY Ecology



Irpin boasts several parks and recreational spaces that provide its residents and visitors with a place to relax, unwind and connect with others, with nature and with history and unwind, such as the Central Park and the Pravyk's Park.

Irpin's natural ecology is unmatched throughout the region. The prisine rivers, forests, and parks within the territory define the identity, character, and physical form of the city. They are crucial not only for their environmental functions, but also for the health and well-being of residents. Additionally, the city's ecology is a vital tourism asset for the region.

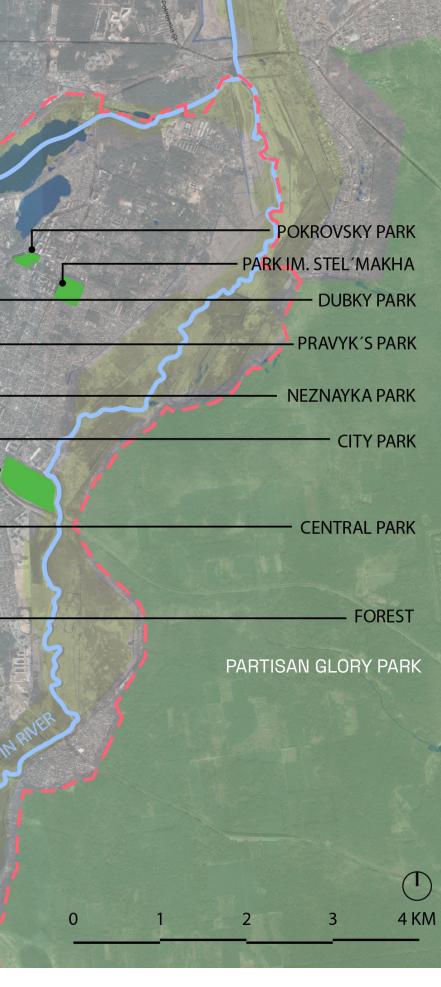


PARK MAMY

WRITERS PARK

LEGEND

Parks
Rivers / Lakes
- Irpin Region



IRPIN YESTERDAY Neighborhoods



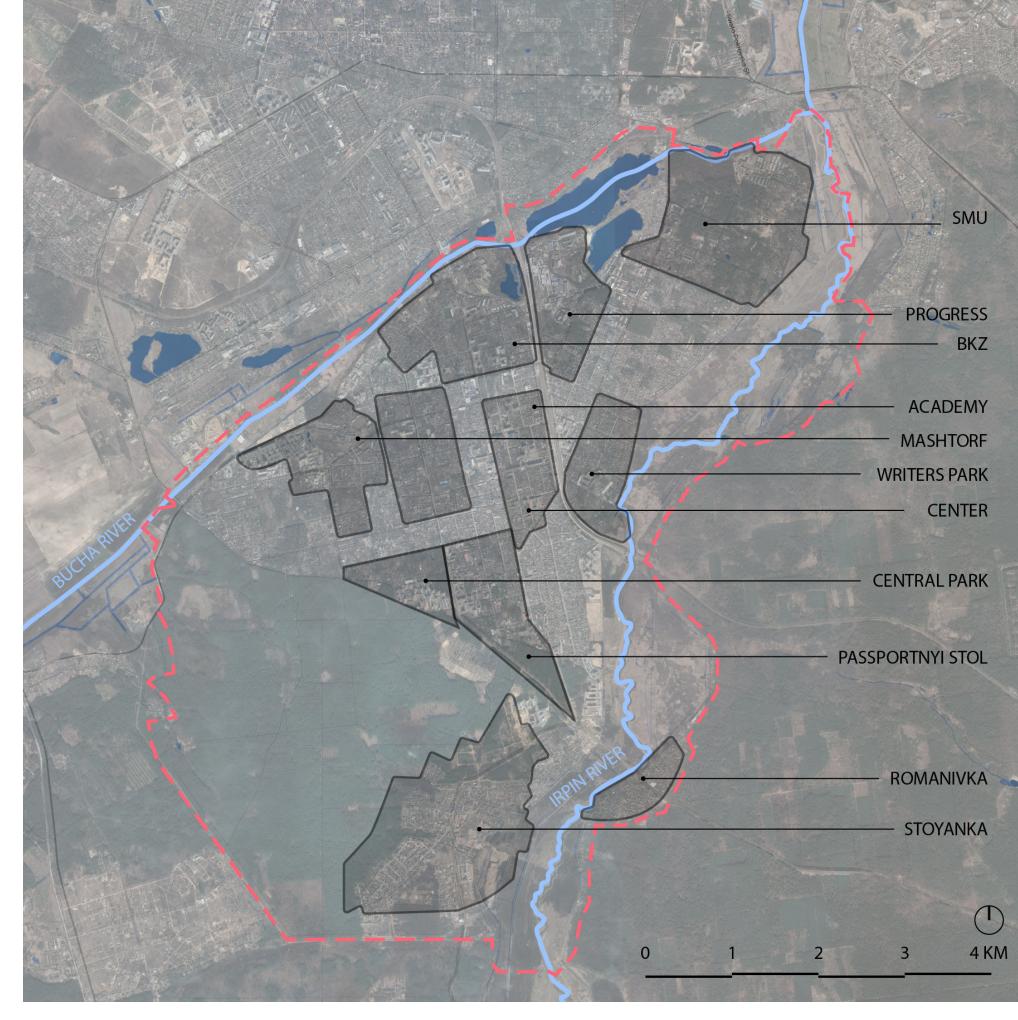
The city's many historic settlments have come to define distinct neighborhood zones, each with their own architectural character, cultural assets and amenities. Shared amongst all residents is a deep appreciation and cultural connection to the rivers and forests that define the experience within the region.

LEGEND

Neighborhood

Rivers / Lakes

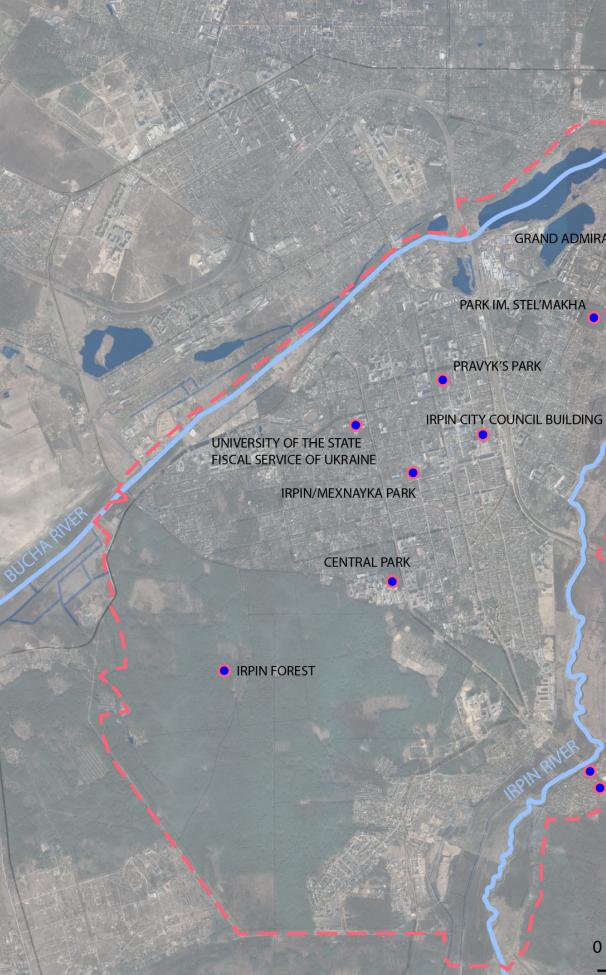
– – Irpin Region



IRPIN YESTERDAY Points of Interest



Key landmarks - including natural landscapes, parks, open spaces, institutions, and historical sites and markers - are dispersed throughout the territory. The vision amis to protect and uplift these existing landmarks, while establishing new places and spaces for residents and visitors to build community.



LEGEND

- Landmark
- Rivers / Lakes
- – Irpin Region

GRAND ADMIRAL RESORT

HISTORIC STATUE

0

SVYATO-HEORHIYIVS'KA **TSERKVA UPTS (CHURCH)**

2

3

 \bigcirc

4 KM



Irpin Today

STRATEGIC VISION PLAN

During the Russian invasion of Ukraine that started in February 2022, Irpin became the site of a battlefield. The city was shelled and destroyed by Russian artillery while Irpin residents resisted and fought back bravely.

From that moment on, the Ukrainian authorities initiated a process to begin reconstruction. This project is one of many in the country's campaign to rebuild.

IRPIN TODAY Statistics

The damages of the battle reached far beyond military losses. Many vital social facilities and private residences were impacted, resulting in the forced displacement of tens of thousands of residents. The impacts of the devastation will be felt for generations, but the city of Irpin and its residents will rebound and grow stronger together towards the future.

3

Social facilities completely destroyed

Destroyed social infrastructure facilities

119

Multi-story buildings destroyed



Private residential buildings destroyed

16,358

Inhabitants of Irpin left without homes

60,635

Residents left with damaged homes

IRPIN TODAY Overview

83

In March 2022, during the Russian Invasion of Ukraine, Irpin was attacked by enemy forces seeking to reach the capital. Much of the city was left in ruins resulting from the month-long conflict.

IMAGES COURTESY OF: XXXXX





What we heard

STRATEGIC VISION PLAN

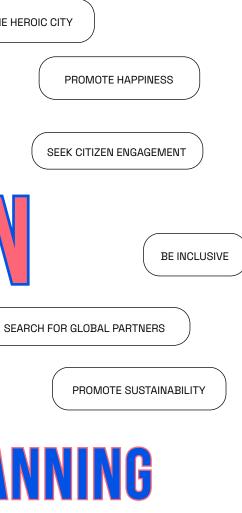
WHAT CITIZENS + LEADERS SAY **Priorities of City Leaders**

Prior planning processes and key stakeholder interviews with city leaders have highlighted several key themes woven into the Vision Framework. These ideas and concepts, represented below, will drive the planning approach and recommendations for the reconstruction effort.

After citizens returned to Irpin, leaders engaged them in conversations about reconstruction priorities and how a more resilient future for Irpin be imagined.

CREATE A GARDEN CITY ADVOCATE FOR THE HEROIC CITY DESIGN A PROSPEROUS, COMFORTABLE AND LIVABLE PLACE **ENCOURAGE NATURE PRESERVATION + EXPANSION** SYNERGY WITH WIDER KIEV REGION ADVOCATE FOR LOW CARBON + ENERGY EFFICIENCY REDUCE POLLUTION ECOLOGY + ENERGY RETHINK AND EXPAND HOUSING G Þ H $|\Delta|$ ENDORSE INDUSTRIAL AND COMMERCIAL DEVELOPMENT RETHINK **POST-WAR** SUPPORT IMMIGRATION ATTRACT TOURISM **URBAN PLANNING** EXPAND WALKABILITY DEVELOP CRITICAL INFRASTRUCTURE

DISCARD SOVIET PLANNING BUILD UP DENSITY DEVELOP PHASING: SHORT, MEDIUM, LONG TERM PROMOTE REPAIR VERSUS REBUILD PRIORITIZE FUTURE-FOCUSED MOBILITY **IMPROVE SAFETY + SECURITY**



what we heard City Pulse in Irpin

Gensler's City Pulse, conducted by the Gensler Research Institute, is a survey designed to capture the human experience in urban environments. This survey was conducted in Irpin to understand the residents' preferences and priorities as they navigate this uncertain time. People who live in a city are the ones who know it best, making their voice instrumental in the process of rebuilding.

The objectives of the survey were to determine immediate reconstruction priorities and identify development opportunities to help shape a more resilient future for the city. Aside from general reconstruction efforts, residents were asked for their thoughts on how pivotal landmarks that have been altered or destroyed during the conflict should be rebuilt. These sites have the potential to memorialize Irpin's past while charting the course for how residents will interact with their city in the future.

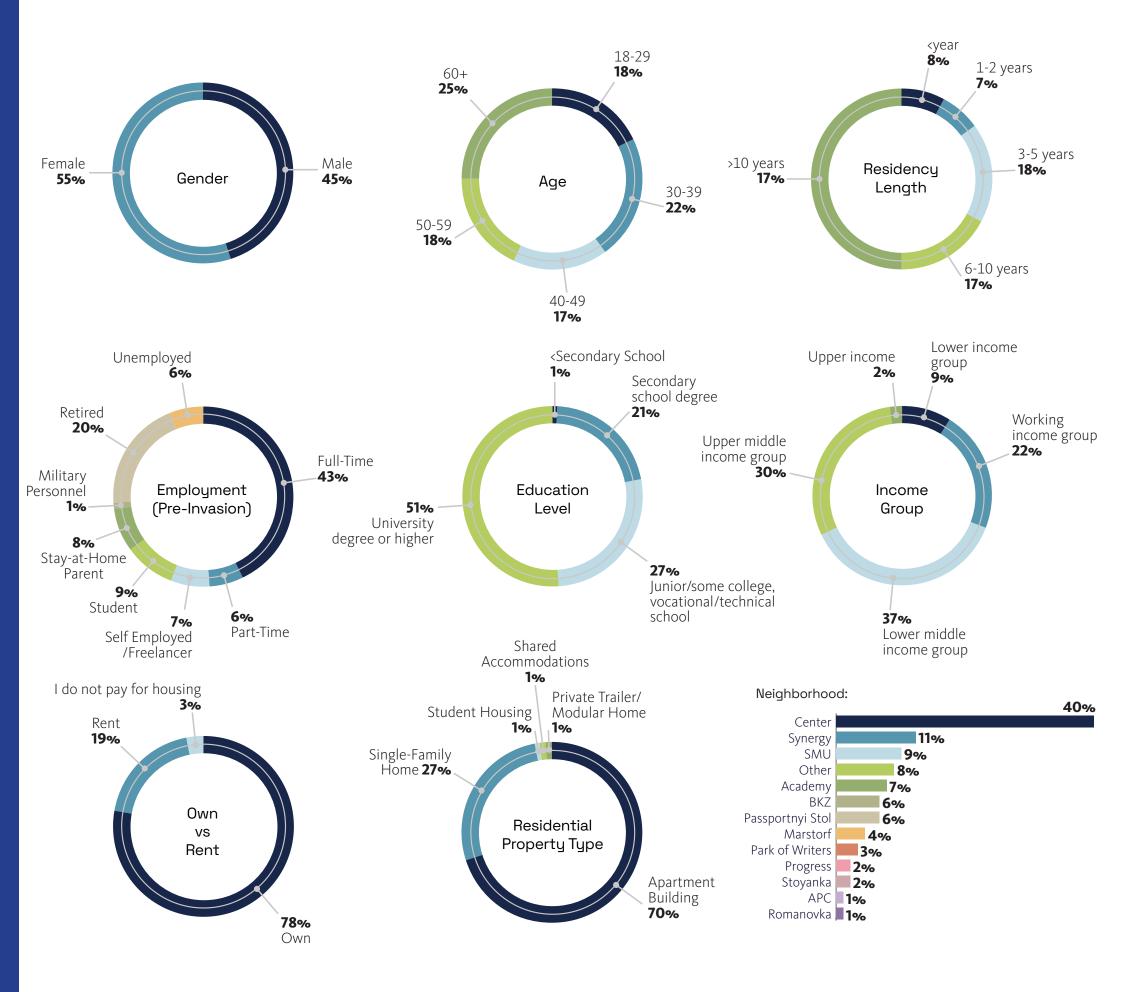
By including the voice of the people, rebuilding can entail not just physical infrastructure of cities like Irpin, but also the social fabric that binds them together as a community.

what we heard Methodology

Capturing the voice of the people

The Irpin City Pulse survey was conducted between February 27th and March 2nd, 2023, aided by Ukrainian research firm SOCIS. The sample included 400 respondents, all demographically diverse by age, gender, income, and education levels.

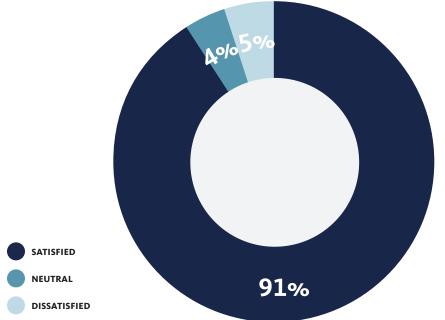
Roughly 1 out of 3 people that participated in the survey owned property in the city. The majority of respondents lived in apartment buildings. The survey captured the voices of many long-term residents, with half of the respondents having lived in Irpin for more than a decade.



WHAT WE HEARD Irpin Before the Invasion

Before the invasion, Irpin residents felt pride in the city's beauty and quality of life.

How satisfied were you with the quality of life in Irpin before the Russian invasion of Ukraine in 2022?

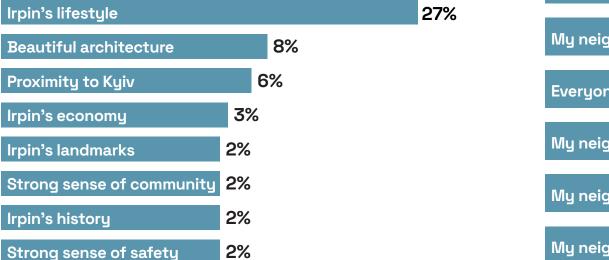


Our data shows that Irpin residents felt overwhelmingly enthusiastic about their urban environment before the war. When asked about their quality of life in Irpin before the Russian invasion, 91% said they were satisfied.

Natural Beauty Irpin's lifestyle

Prior to the invasion, what gave you the

most pride while living in Irpin?



To help understand why residents were so satisfied, we asked what gave them a sense of pride while living in Irpin. Residents were most proud of Irpin's natural beauty. They were also proud of the lifestyle that Irpin provided.

36%

The satisfact
also extende
agreed that t
streets befor
neighborhoo
options.

Prior to the invasion, I agreed with the following statements about my neighborhood:



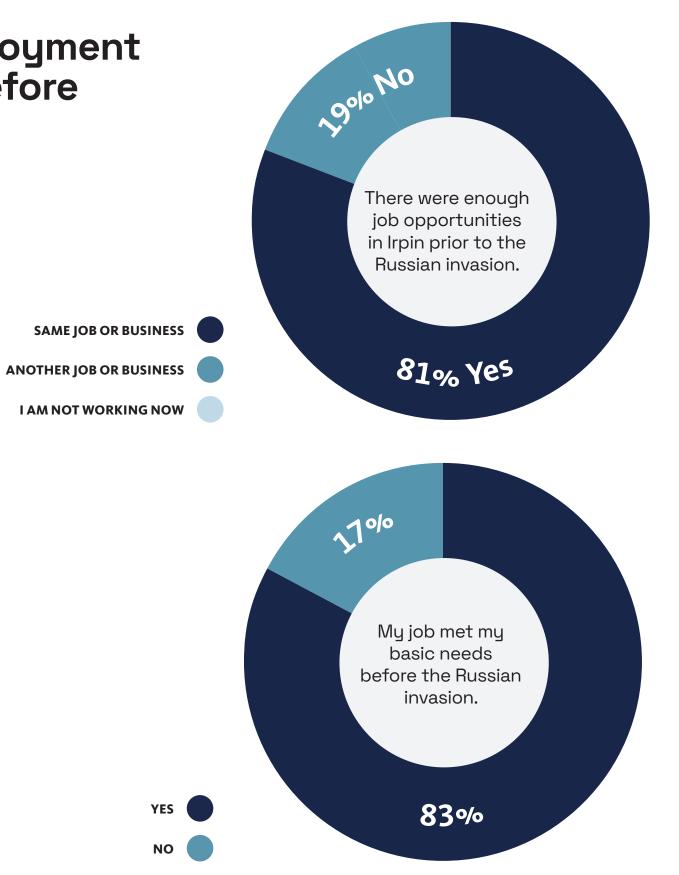
ion and pride that residents felt in their city d to their neighborhoods. 88% of respondents their neighborhoods were beautiful and had clean e the Russian invasion. People also felt that their ds were welcoming and provided good housing

WHAT WE HEARD Irpin Before the Invasion

Opportunities for employment and stability soared before the invasion.

Irpin, prior to the invasion, offered its residents financial stability and employment opportunities. 8 out of 10 respondents agreed that Irpin provided enough job opportunities before the Russian invasion. 83% of residents felt that their job met their basic needs.

Today, nearly 3 out of 4 residents have returned to their same job or business. 17% have a different job or workplace than they did before the invasion. Nearly half do not feel that their current job meets their basic needs.



Are you in the same job or business as before the invasion or in a different one?

10%





17%

My job meets my basic needs today.

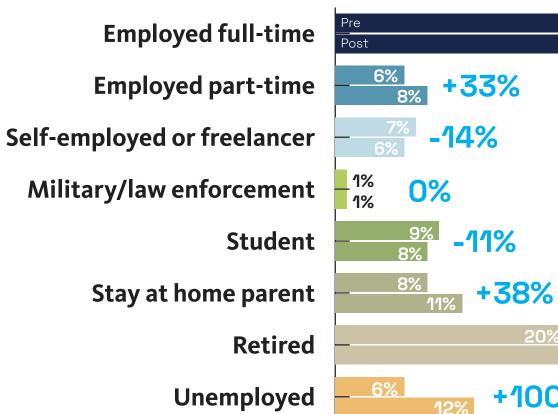


STRATEGIC VISION PLAN

Full-time employment has decreased since the start of the conflict.

Before the Russian invasion nearly half of respondents were employed full-time. Since the conflict, fewer than 1 in 3 Irpin respondents are employed full-time. Twice as many respondents are unemployed now (12%) than in pre-war times (6%).

Employment status:







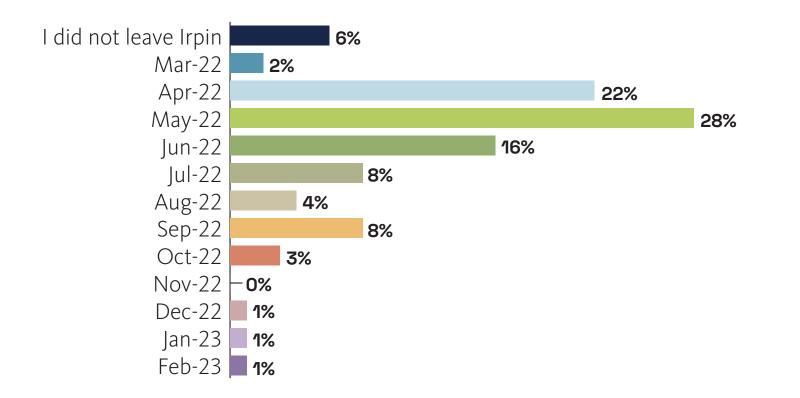
20%

+100%

STRATEGIC VISION PLAN

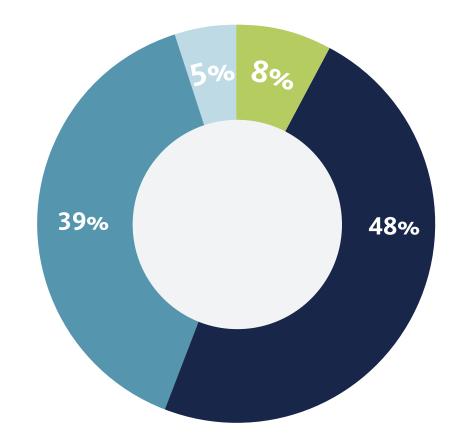
Many of Irpin's residents returned to seriously damaged neighborhoods.

In what month did you return to live in Irpin after the Russian invasion of Ukraine in February 2022?



Many Irpin residents returned to their city soon after Ukrainian forces recaptured the city at the end of March 2022. Two-thirds of respondents returned to live in Irpin between April and June of 2022.

How would you assess the current state of your neighborhood as a result of military operations?



Roughly half of residents feel that their neighborhoods are seriously damaged as a result of military operations. 8% of respondents' neighborhoods are entirely destroyed.

COMPLETELY DESTROYED SERIOUSLY DAMAGED, BUT NOT DESTROYED NOT SIGNIFICANTLY DAMAGED NOT DAMAGED AT ALL

STRATEGIC VISION PLAN

In the aftermath of the **Russian invasion, Irpin** residents want to prioritize public safety and growing the city's economy.

When asked about reconstruction efforts, Irpin residents feel that the top priority should be to control crime and assure public safety. This entails repairing and rebuilding damaged infrastructure (including roads, bridges, and public buildings) and providing support for those displaced by the conflict. Respondents also identify economic growth and expansion as a key area of concern, along with launching medical facilities and services.

What should be the top priorities for rebuilding efforts?

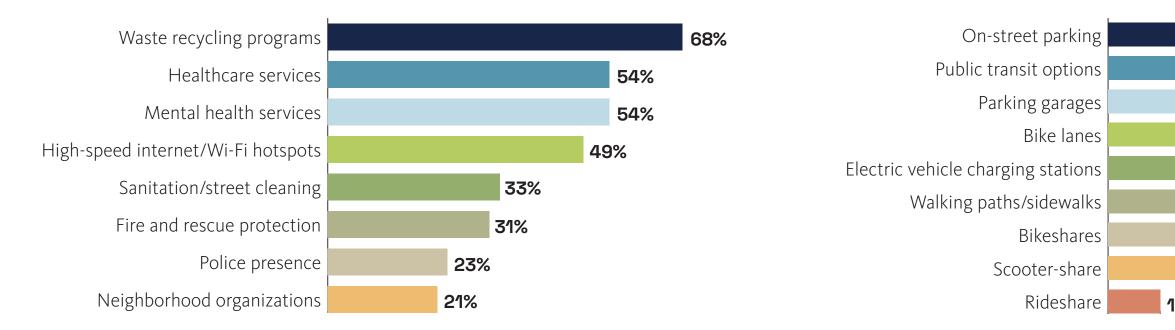


MY
AL
TY
TION
IG
SSES
ERVICES
ES

what we heard Irpin Now

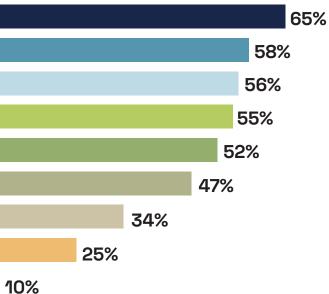
Waste recycling, healthcare, and parking services are top-of-mind for residents.

My city needs more of the following services:

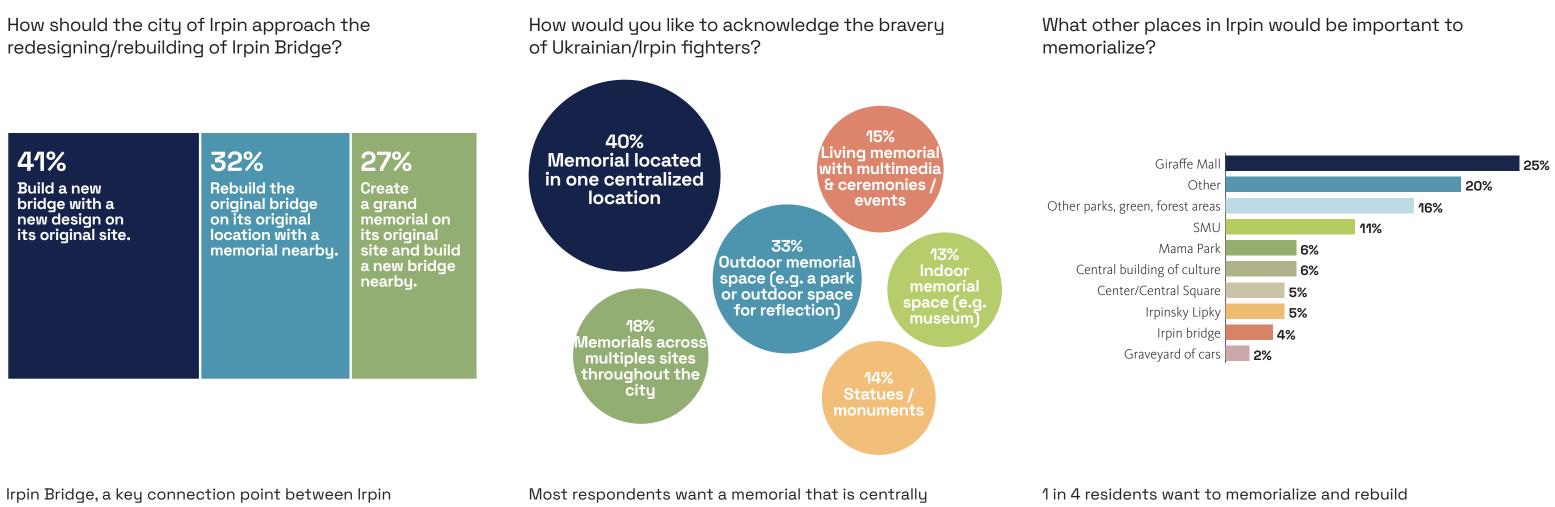


Irpin residents feel that their city needs more waste recycling programs. Healthcare services (for both physical and mental health) are also top priorities. When it comes to mobility services, respondents feel their city needs more parking options. Increased access to public transit options is also important to Irpin's residents.

My city needs more of the following mobility services:



Irpin residents want to memorialize the people and places affected by the invasion.



and Kyiv, was strategically destroyed to delay the advancement of Russian troops. To memorialize Irpin Bridge, most residents want a new bridge with a new design on its original site.

located and provides an outdoor place for reflection to acknowledge the bravery of the city's defenders. More than a museum, monument, or statue, Irpin residents want a memorial that is integrated into the fabric of the city.

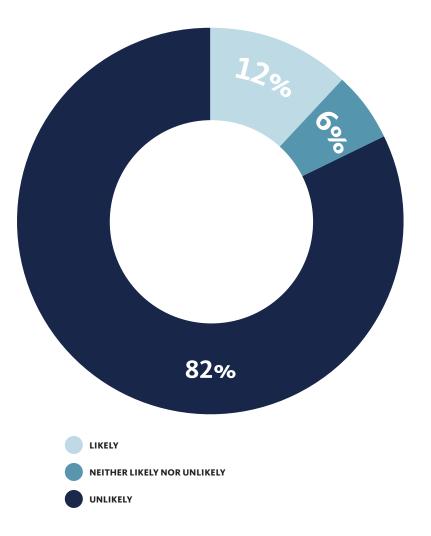
restored.

Giraffe mall, which was hit by an airstrike in the early days of the Russian invasion. Respondents also want the city's parks and forest areas to be

WHAT WE HEARD The Future of Irpin

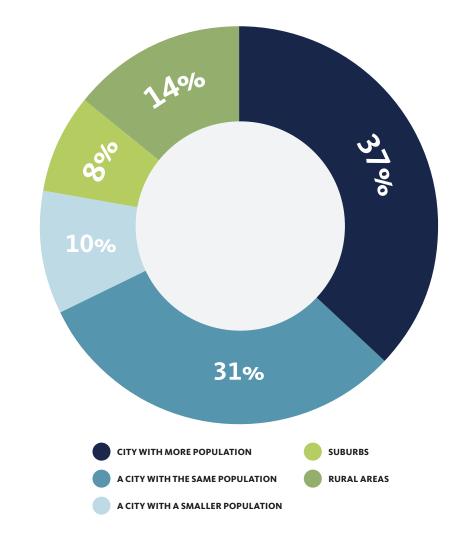
Irpin residents want to stay in their city.

How likely are you to move from the city of Irpin?



82% of Irpin residents say they are unlikely to move out of the city of Irpin. Just 12% say they are likely to relocate. This is an overwhelming indication of people's commitment to Irpin and its future.

Where would you most likely move?



Of those who are likely to move out of the city of Irpin, roughly 1 out of 3 respondents would move to a city with a larger population. 31% of residents would move to a city with a similar population. Just 14% would relocate to a rural area.



The people of Irpin are overwhelmingly optimistic about the future of their city.

What towns or cities in the world are comparable to your vision of Irpin's future?

65% Irpin, my hometown, my home

11% Other Ukrainian cities

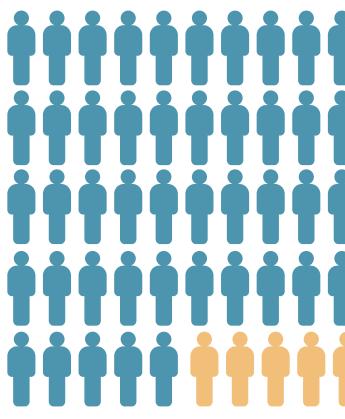
10% Other European cities (Rome, Paris, Madrid, Munich, Prague, Amsterdam, etc.)

4% United States/Canadian cities

We asked residents to imagine Irpin in the future and

identify any town or city, anywhere in the world, that embodied the type of place they wanted Irpin to become. An overwhelming majority want their city's future to reflect its pre-invasion past.

🏺 OPTIMISTIC 🌻 NEUTRAL 🏺 PESSIMISTIC



Despite the violence and instability experienced during the Russian invasion, over 80% of Irpin residents feel optimistic about their city's future. This is a powerful testament of the resilience of the people of Irpin and of Ukraine.

Today, how do you feel about the future of your city?

In distant, radiant Irpin How colors shine! How the blood boils in the heart, Majestic words are found In quiet, dear Irpin.

> MAKSYM TADEYOVYCH RYLSKY UKRAINIAN POET, POET-ACADEMIC, TRANSLATOR, PUBLICIST.

> > STRATEGIC VISION PLAN



Irpin Tomorrow

STRATEGIC VISION PLAN

PAGE 73

FRAMEWORK FOR THE FUTURE Vision

Irpin is a Garden City of Heroes and Poets. Positioned to be the rising Smart Heart of Ukraine, it will serve as a model of reconstruction for the Nation towards a more resilient, livable and hopeful future.



FRAMEWORK FOR THE FUTURE Planning Principles

PROMOTING **LIVABILITY**

> FOSTERING A GREEN **ECOLOGY**

IRPIN GARDEN CITY CITY OF HEROES

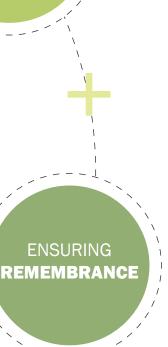
STIMULATING **GROWTH** AND TRANSFORMATION

ENSURING

CONNECTIVITY

BUILDING ROBUST RESILIENCE PRIORITIZING NEEDS

IRPIN FUTURE RESTORATION PLAN FOR UKRAINE X GENSLER



FRAMEWORK FOR THE FUTURE **Planning Principles**





- Restore peaceful, bucolic, and natural character of the city
- Rebuild "Old Irpin" to its livable character while steering growth to the city's perimeter
- Replace old Soviet planning models for walkable, low-scale, mixed-use communities
- Prioritize housing, redevelopment, innovation, and expansion
- Strengthen character and resilience of legacy neighborhoods and embrace "15-minute city" concepts
- Prioritize and support immigration
- Establish an innovation district at a northern gateway to ۰ the citu
- Support development that would accommodate a future population of 100,000
- Relocate industrial core to west of city
- Attract tourism and develop tourism infrastructure



BUILDING ROBUST

RESILIENCE

- corridors

- Adopt EU standards

- ۲ ENSURING REMEMBRANCE

 - ۲ citu
 - ٠

NEEDS FOSTERING A

GREEN ECOLOGY

- Urgently address critical infrastructure reconstruction
- Prioritize housing
- Implement prioritized projects redevelopment
- Support city expansion

- Clean up and restore the Irpin River
- Ensure and expand the citu's "green lungs": forests, parks, and riverfront
- Introduce resilient natural systems and landscape into the citu center
- Promote urban farming along riverfront ٠

Establish interconnected bike and pedestrian corridors through and around the city Build monorail to Kyiv Alleviate city traffic through new circumnavigating

Create new city-center transit hub

Build robust security and safety Prioritize reconstruction of critical infrastructure Plan for sustainability

Strengthen symbolism of Hero City Create interconnected pedestrian bridge network across Irpin and Bucha Rivers Establish symbolic and memorable "gateways" into the

Rebuild Irpin Bridge as a highly functional and technologically advanced structure Curate memorialization at key locations

FRAMEWORK FOR THE FUTURE Urban Design Strategies - Bridging to the future



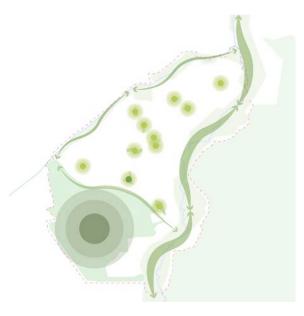
Bridging Irpin to Its Neighbors

Balancing investments in regional mobility infrastructure including highways with active transportation networks including trails, pathways and transit networks.



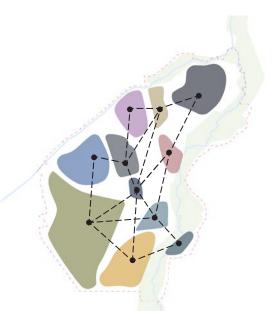
Bridging the City's History to Its Future

Balancing investments in the restoration of historical and ecological assets with smart growth in clean industry and concentrated mixed-use neighborhoods.



Bridging People to Nature

Balancing investments in local parks, streets, and community qardens with regional environmental resources including the Irpin and Bucha Rivers and the forest.



Bridging Neighbors to One Bridging Irpin to the World Another

Investing in physical and Uplifting Irpin as a global social connections that model of smart growth and harmoniously unite the diverse ecologically regenerative urbanism and a welcoming hub lifestule zones of the old citu and new river districts under of creativity and industry in a shared cultural identity and Ukraine. civic pride.



Neighborhood Plan

Irpin's plan is driven by the desire to:

Increase livability, with the conviction that mixed-use in urban areas creates a more diverse and vibrant environment, provides residents with access to a range of amenities within walking distance (e.g. shops, restaurants, healthcare, and educational/ cultural institutions)

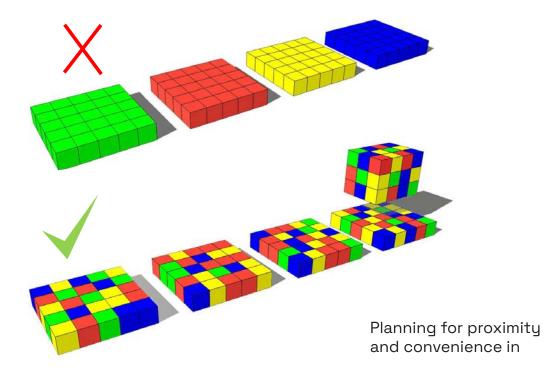
Improve accessibility and promote walkability, reducing traffic congestion, air pollution, and the need for car use

Enhance economic activity by creating a more diverse range of businesses and job opportunities, and attracting a greater number of customers to the area

Reduce development costs as the same infrastructure, such as roads and utilities, can serve multiple uses, reducing the need for separate infrastructure for each use

Offer a more balanced and optimized land use, reducing the need for sprawling development and conserving green spaces and other natural areas

Increase the resilience of the urban environment helping buffer against economic fluctuations and other disruptions, and providing a more stable and secure environment for residents and businesses.



BKZ Residential neighborhood near the Bucha River. It is the gateway to Irpin from Bucha. The neighborhood was recently developed and only needs infrastructure reconstruction.

12

The Heart of Irpin

This is the business centre of Irpin, completely reconstructed in 2016. Includes parks, sports center and music school. There is a large Azerbaijan diaspora in this neighborhood.

Akademiya -

Home to the State Tax University & the Temple of Saint Nicolas the wonderworker of OCU. Rapidly developing, densely populated, lots of new housing projects.

Mashtorf Densely populated, with lots of private housing and new high rises, can support the rapidly growing academic neighborhood.

Potoky National reserve with potential to become a landscape park and a refuge for wildlife.

Stoyanka Largest concentration of private residences. Has potential to extend towards the riverfront and build more housing.

SMU

Most destruction of private residences with fewest number of people returning to the neighborhood. 30 existing mid-rise buildings in this neighborhood are to be demolished.

PROGRESS

Mainly industrial, with Planeta Plastik located here. Sits on the edge of the reservoir, quarry and the lake 'Zemsnarad'. Borders the railroad track to the west and could host a transit hub.

WRITER'S PARK

13

Irpin's oldest neighborhood. It currently has no efficient access from the east end of the train station and is completely disconnected from the west end of Irpin, as it sits right by the railroad track.

PARK CENTRALNY

Surrounds the largest park in the city. High end multi- family housing, restaurants, etc... This neighborhood is in high deman in Irpin.

VODOKANAL

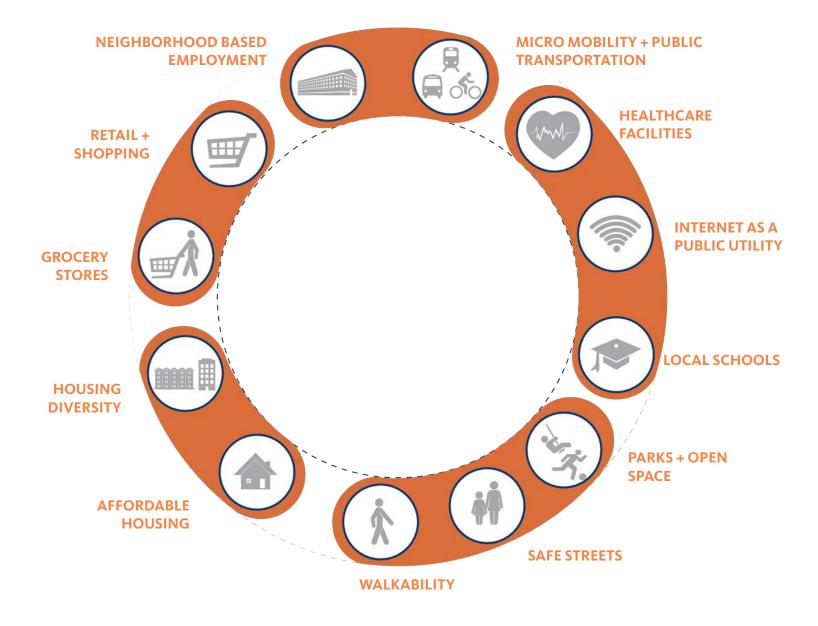
Located at the gateway to Irpin from Kyiv and surrounded by the river on the east end and the forest on the west end. Multi apartment buildings in this neighborhood are developed, little intervention is needed.

ROMANIVKA

Transitioned from a village to a residential area in Irpin. Located at the gateway to Irpin and surrounded by the river on the east end and the forest on the west end. It is home to significant monuments and tourist routes.

PROMOTING LIVABILITY 15-minute City

PROMOTING LIVABILITY Precedents of Repurposing



The 15-minute city is based on the idea of creating compact, walkable neighborhoods that promote a sense of community and reduce carbon emissions. By reducing the need for cars, the 15-minute city can help reduce traffic congestion and air pollution, making cities healthier and more enjoyable places to live.

The images on this page contain examples of building re-use. These best practices can be used to rehabilitate Irpin's deteriorated buildings. Reusing existing buildings is a more cost-effective and sustainable option as it helps to reduce the demand for new resources and minimizes environmental impact. In addition, reusing buildings can help preserve historic and cultural landmarks, which can be valuable assets to a community.



Rehabilitation of social housing blocks in Bordeaux, by Lacaton & Vassal Architectes



Refurbishment of soviet-era prefabricated building in the center of Warsaw

Refurbishment project at Tour Bois-le-Prêtre by Lacaton & Vassal Architectes



Destroyed and new peace monuments in Medellin, Colombia

GROWTH & TRANSFORMATION Economic Development

Irpin was a happy growing city pre-war. Its post-war redevelopment relies not only on rebuilding existing infrastructure, but on expanding existing opportunities to account for internal migration and general growth of the city.

Industry: Future plan for the city will include an innovation corridor along the Bucha River. It will be anchored with a clean technology mixed use development on the north end, to include residential, work, and education sectors, and terminate on the south end with a technological park. The core of this spine will offer residential, retail and work components, and will connect with the University District.

Residential: Acommodating Irpin's residents with housing will rely on multiple approaches. Priorizing the rebuilding of damaged and destroyed housing is key. This will be followed by densification of select residential areas, and additional developments of varying densities along the Irpin River.

Retail: Gateways into the City will be framed by retail developments - to include open air mall, market, and enclosed retail facilities.

Cultural: Existing character of the city will be celebrated through restoration of cultural hubs, such as the Writer's Park. Social venues will be expanded via music and sports venues.

LEGEND

Existing

Existing rail road

Existing Transit Hub

Proposed

- Proposed Transit Hub
- Gateway
- Proposed Land Bridge at Gateway
- Proposed Retail Plaza
- Proposed IOW- density mixed use districts
- Proposed Convention Centre
- Proposed Mall
- Proposed School
- Innovation District Core



IRPIN FUTURE RESTORATION PLAN FOR UKRAINE X GENSLER

PRIORITIZING THE NEEDS

Priority Reconstruction Projects

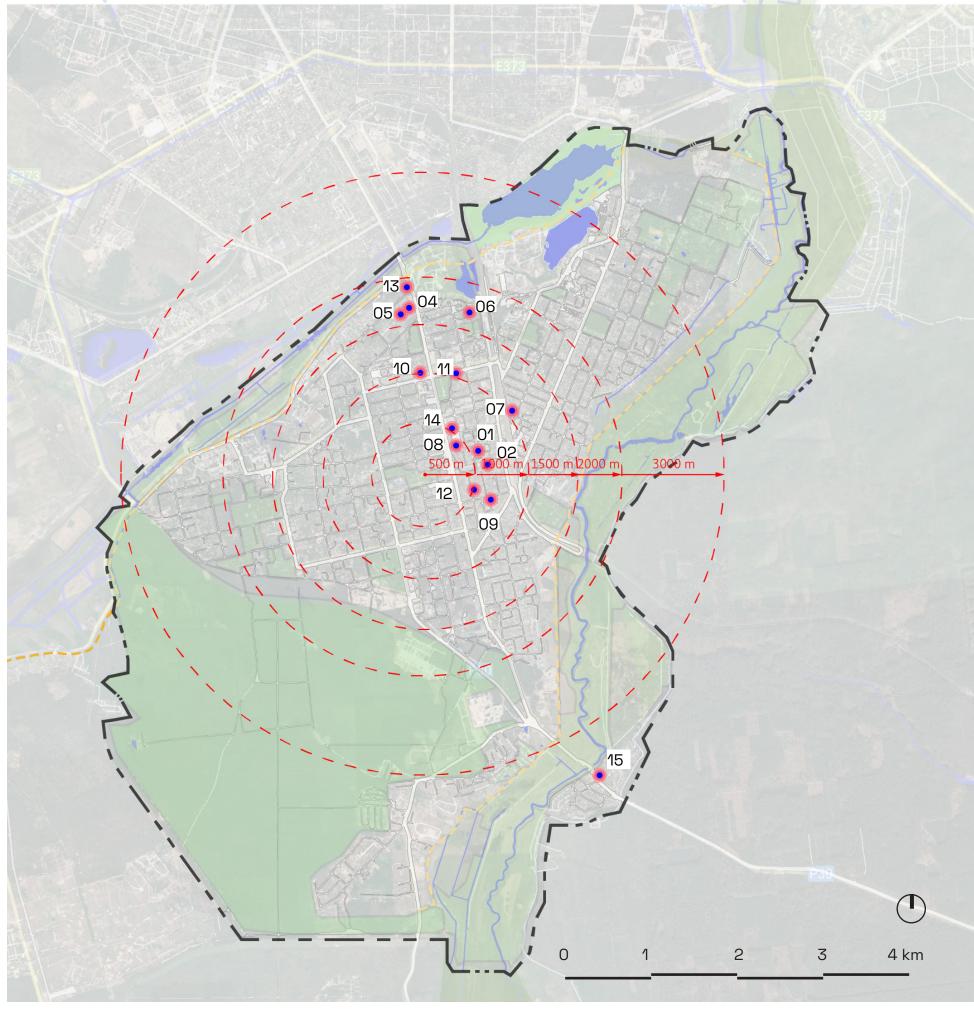


Prior to pursuing some of the more visionary, long-term redevelopment efforts identified within this framework, there are a series of priority reconstruction efforts which must take precedence to begin to restore the social and physical infrastructure of Irpin.

As indicated in the red line, it is proposed to execute the project in phases from the heart of the city towards the perimeter, with the area around City Park being the first phase. Rebuilding will be prioritized over new developments.

LEGEND

- 1. Irpin Museum of History and Local Knowledge
- 2. Irpin City Library
- 3. "The Road of Life" Cultural and Leisure Center
- 4. Central House of Culture
- 5. Irpin Central City Stadium "Champion"
- 6. Preschool Educational Institution No. 6 "Radist"
- 7. Preschool Educational Institution No. 2 "Vesnyanka"
- 8. Irpin Lyceum of Innovative Technologies Small Academy of Sciences
- 9. Irpin Lyceum of The National University of Bioresources and Natural Use of Ukraine
- 10. Irpin Specialized Secondary School of Grades I-III With In-Depth Study of Economic and Law No. 2
- 11. Irpin Specialized Secondary School of Grades I-III of the Art Profile No. 1 "Makarenka"
- 12. Irpin Children's and Youth Sports School
- 13. Bicycle Path
- 14. Freedom Square on the Place of the Old Market
- 15. R-30 Memorial Bridge Reconstruction



Ecology & Environment Plan



Pictures of current state of Irpin River

Key green strategies to implement to ensure a sustainable development for the future of Irpin:

- 1. Reduce, Reuse, and Recycle
- 2. Use Renewable Energy Sources
- 3. Implement Sustainable Transportation
- 4. Promote Energy Efficiency
- 5. Adopt Green Building Practices
- 6. Conserve Water
- 7. Practice Sustainable Agriculture
- 8. Support Local and Sustainable Businesses
- 9. Use Eco-Friendly Products
- 10. Educate and Raise Awareness

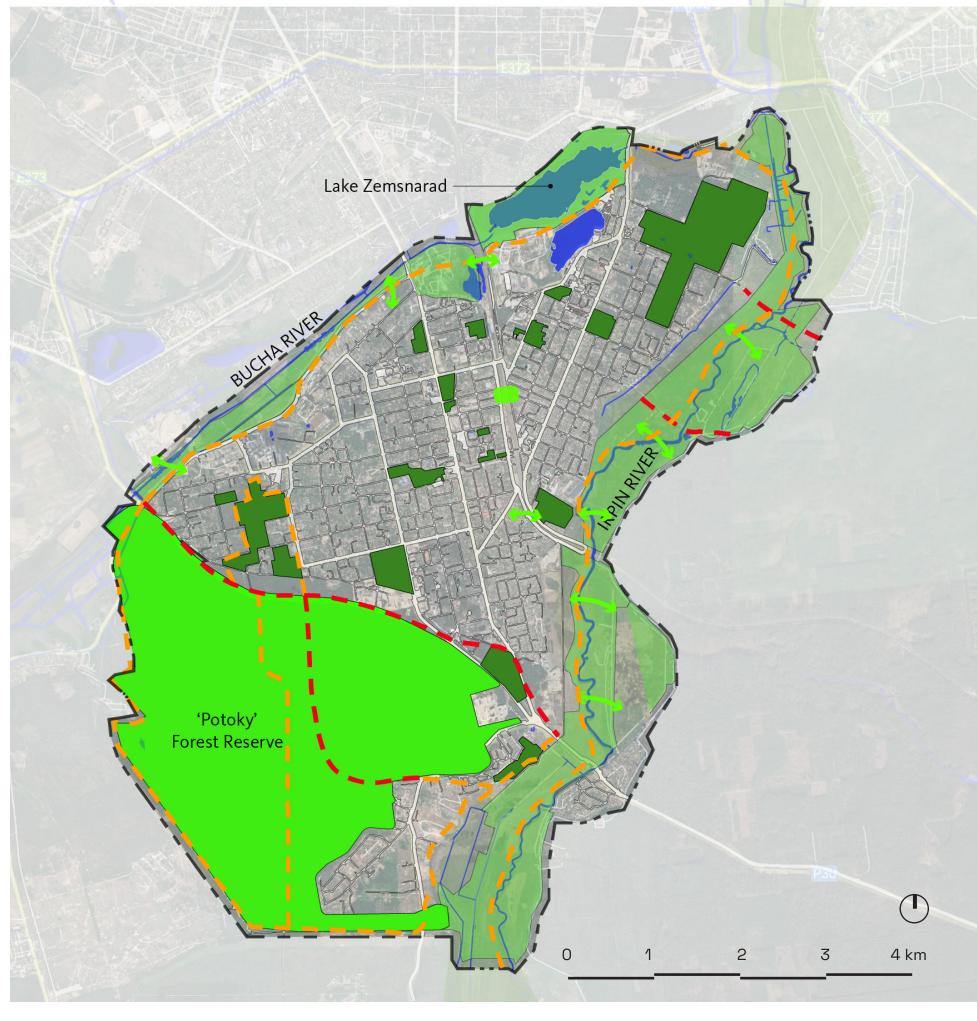


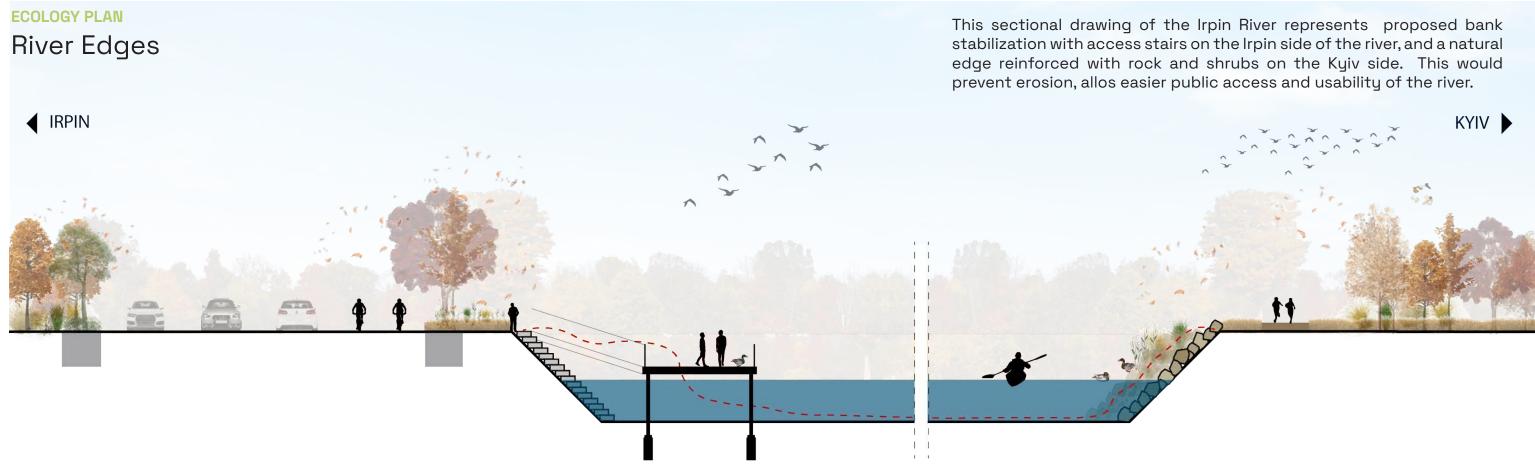
- - Proposed Bike Path
- Existing Bike Path



- Proposed Land Bridges
- Existing Forest Reserve
- Existing Parks

Existing Floodplain





2.00	1.50	3.00	3.00	3.00	3.00	1.50	2.00	VARIES	VARIES	VARIES	2.00	VARIES
PEDESTRIAN	- SHADE BUFFER	TRAVEL LANE	TRAVEL LANE	Parking	MOBILITY	SHADE BUFFER	PEDESTRIAN	STEPS	RPIN RPIN	ACTIVE EDGE	PEDESTRIAN	VATURAL HABITAT

Proposed conditions of Irpin River



Active water

Trails & piers

Steps

Natural edges





Activating the pier

CONNECTIVITY Mobility Network & Connectivity

Irpin has the advantage of a robust mobility network within and surrounding the city. Some congestion within the city can be aleviated, by rethinking regional highways and rerouting regional traffic around the city, rather than through it.

Adding a multi-modal transportation hub can also relieve traffic coming into Irpin from Kyiv as well as passing through.

Finally, a stronger vihicular and pedestrian connection between east and west sides of the city would also strengthen the connectivity.

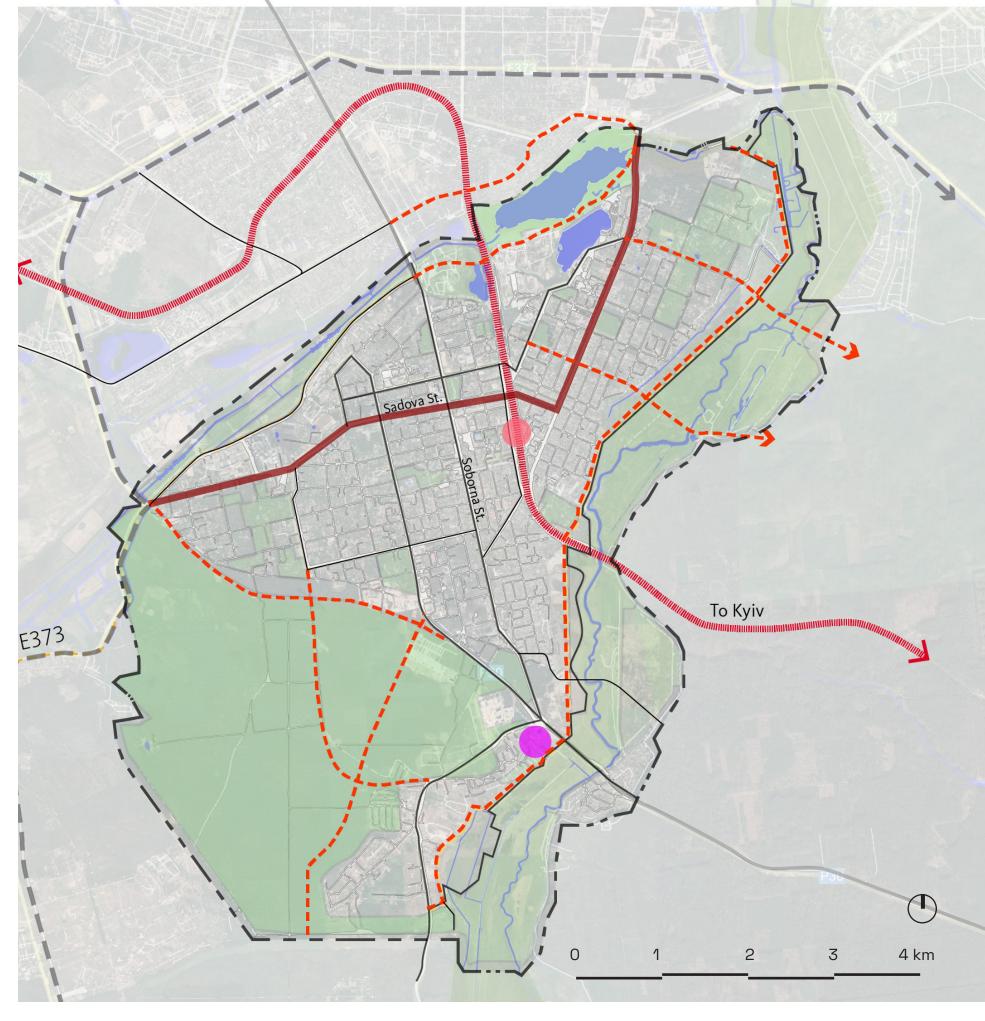
LEGEND

Existing

- Existing rail road
- Existing Thoroughfares
- —— Irpin region
- Existing Transit Hub

Proposed

- --- Future proposed roads
- Proposed Boulevard
- Proposed Transit Hub



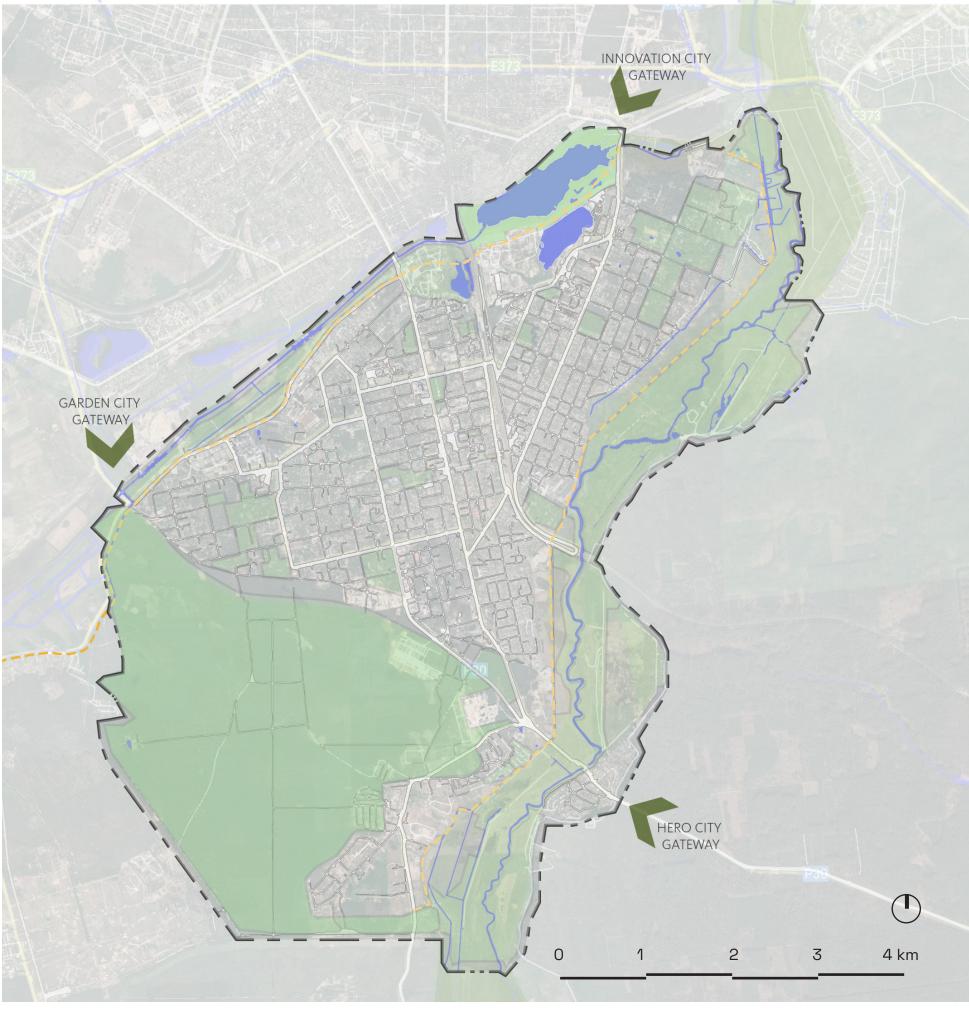
CONNECTIVITY Gateway Plans



Hero City Gateway

Innovation City GatewayGarden City Gateway

Gateways serve as points of visual reference, landmarks, symbols of identity, and practical structures for city planning and defense. Whether you are a visitor or a resident, they provide a sense of arrival and departure that helps to define the character of a city.



RESILIENCE

Aligning with Ukraine Reconstruction **Priorities and EU Standards**

Ukraine's National Recovery Plan has been put forth as a unique opportunity not just to recover war-related damages, but to leap-frog economic growth and guality of life in Ukraine. This bold proposition underpins Irpin's own vision for reconstruction. The National Recovery Plan further identifies three objectives - Resilience, Recovery, and Modernization and Growth - to guide the efforts.

Specific programs that apply directly to Irpin include:

- Integrate into the EU
- Grow equitable prosperity
- Support Europe's energy security and zero-carbon transition
- Protect and strengthen ecology and environment
- Grow economy, competitiveness, entrepreneurship, and business environment
- Enable private investment and access to funding
- Strengthen transport infrastructure
- Modernize housing and increase energy efficiency
- Rebuild and modernize social infrastructure
- Improve education and healthcare
- Modernize culture and sports systems

Future Ready

- How do we build in resilience, security, and safety of our community for the long term?
- How will we live and work in the next 100 • years?

How do we adapt to climate change

How will our families and communities evolve?

These are important questions to consider for the future of Irpin that require a long term perspective. The answer lies in a commitment to moving Irpin away from a linear, consumption-based mindset to a circular, regenerative approach, where humans coexist in balance with nature.

This is an opportunity to heal, regenerate and connect to the natural systems of Irpin, setting the scene for healthy, vibrant human communities. We seek solutions to harness the region's ecology to drive regenerative solutions.

The future Irpin will be a place that prioritizes livability and promotes health and wellness through planning and integrating multigenerational communities. Irpin will focus on building ample social, health, cultural, and educational infrastructure. It will enable connections of people, places, and communities. And Irpin will help accelerate the coming energy, mobility, and technology transitions.

USE

MAKE

VISION

MOVE TO A CIRCULAR **REGENERATIVE AND RESTORATIVE CITY** METABOLISM

INPUTS

- Food
- Water
- Energy

TAKE

Waste



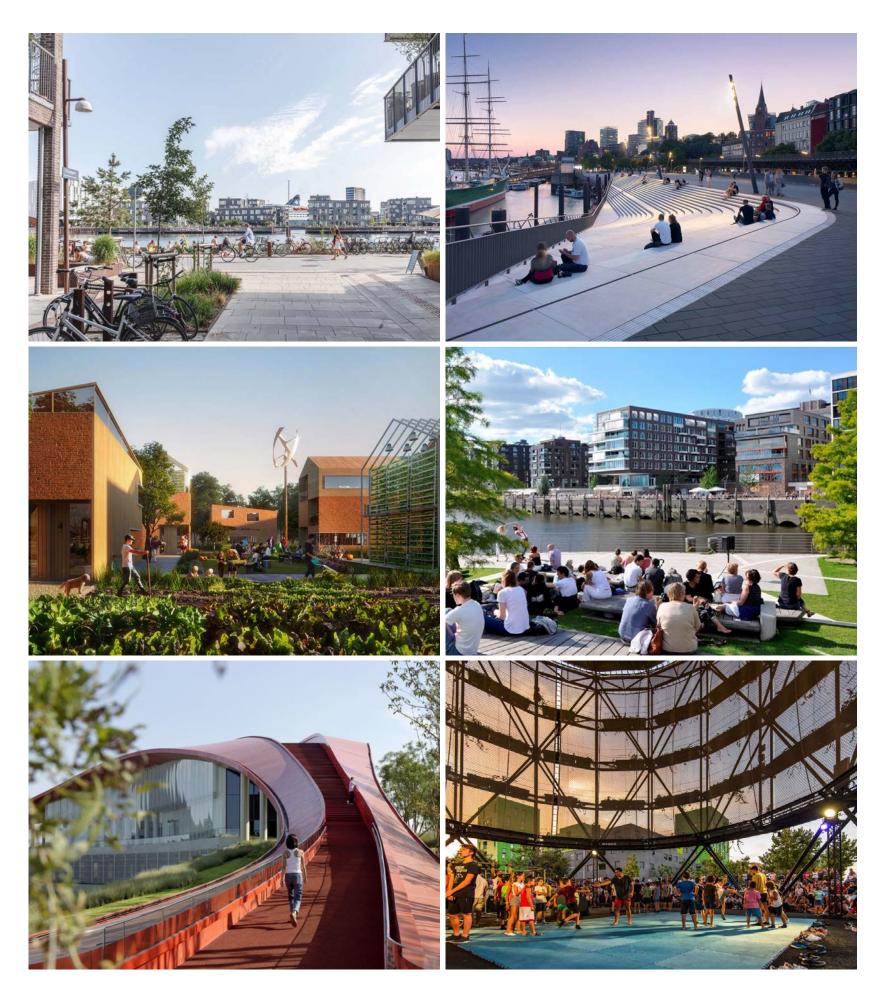


RESILIENCE Refuge, Resilience and Community

The people of Ukraine have experienced prolonged periods of personal and collective trauma resulting from the Russian invasion and the wake of destruction and devastation that followed. By acknowledging the setbacks generated from this trauma and working through curated exercises intended to rebuild trust, community connections, and personal livelihoods, planning for a more resilient and healthy society is possible: a refuge for all to call home.

Underpinning this social resilience framework are the shared values and principles that embody the Irpin of the future that all aspire to create. From these tenets grow a set of participatory planning practices and a development process which rebuilds not only the physical infrastructure lost during the battle, but also the severed social connections and systems of support in-place.

The fruits of this collective planning process will result in a more resilient and regenerative physical environment occupied by a more unified and harmonious community of people working to restore what was once lost and to heal collectively as they look forward optimistically towards the future.



RESILIENCE Safety

Urban Regeneration



Urban regeneration strategies aim to enhance the quality of life for residents, promote economic growth, and create sustainable and resilient urban communities.

- 1. Restore natural ecosystems
- 2. Employ those ecosystem services for basic needs
- 3. Design open space for biodiversity and resilience
- 4. Make space for urban forestry
- 5. Allow open space and street pavement for permeability
- 6. Install permeable ROWs and medians
- 7. Design for a pedestrian scale
- 8. Create 15-minute neighborhoods
- 9. Electricity and sanitary water services
- 10. Reuse materials and design for disassembly



Lakeside Garden, Singapore



Cloudburst Management Plan in Copenhagen, Denmark

Urban Resilience

Urban resilience strategies aim to create more robust, adaptable, and sustainable urban communities that can better withstand and recover from a range of shocks and stresses.

- 1. Design for climate adaptation
- 2. Promote disaster preparedness
- 3. Mobilize community networks
- 4. Arrange evacuation routes
- 5. Open logistic corridors
- 6. Promote citizen readiness & education
- 7. Offer backup power
- 8. Introduce crime prevention through environmental design (CPTED)
- 9. Continue and strengthen the points of invincibility



Upcycle in Austin, USA



Point of Invincibility, Ukraine

Urban refuge strategies aim to create inclusive, diverse, and vibrant communities that provide support and protection for vulnerable citizens and migrants.





Urban Refuqe

1. Harden spatial aspects of housing and public facilities 2. Create resilience hubs: Focal points of education, services and shelter in case of emergency,

- blast protection & others
- 3. Provide centralized amenity centers
- 4. Install social & healthcare infrastructure
- 5. Promote education and training



"Blocks of Care" project in Bogota, Colombia



SuperCADE Manitas, Bogota, Colombia

REMEMBRANCE Key Memorial Precedents

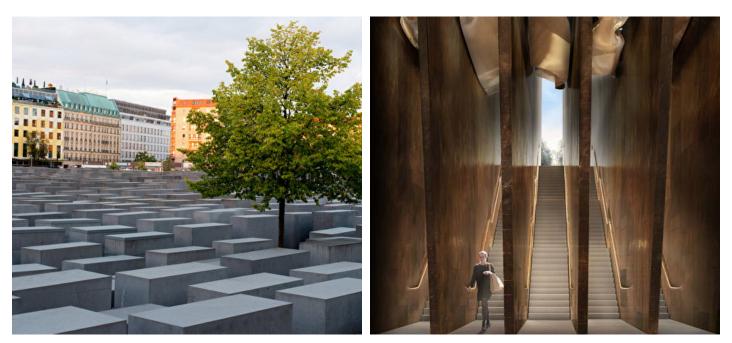
This is a sampling of memorial precedents around the globe, presented for discussion and considerations in Irpin.



9/11 Memorial, NY, USA Handel Architects with Peter Walker



National Memorial for Peace and Justice Montgomery, Alabama, USA MASS Design Group



Holocaust Memorial, Berlin, Germany Peter Eisenman



Memory, Peace and Reconciliation Center, Bogota, Colombia Juan Pablo Ortiz



Vietnam War Memorial Washington DC, USA Maya Lin



West African slaves Memorial, Barbados David Adjaye

UK Holocaust Museum David Adjaye, London, UK



COVID 19 Memorial, Washington DC, USA

MIXED USE DISTRICT



Most destruction of private residences with fewest number of people returning to the neighborhood. 30 existing mid-rise buildings in this neighborhood are to be demolished.



INNOVATION DISTRICT



Neighborhood is mainly industrial, with Planeta Plastik being located here. It also sits on the edge of the reservoir, quarry and the lake 'Zemsnarad'. Borders the railroad track to the west and could host a transit hub.

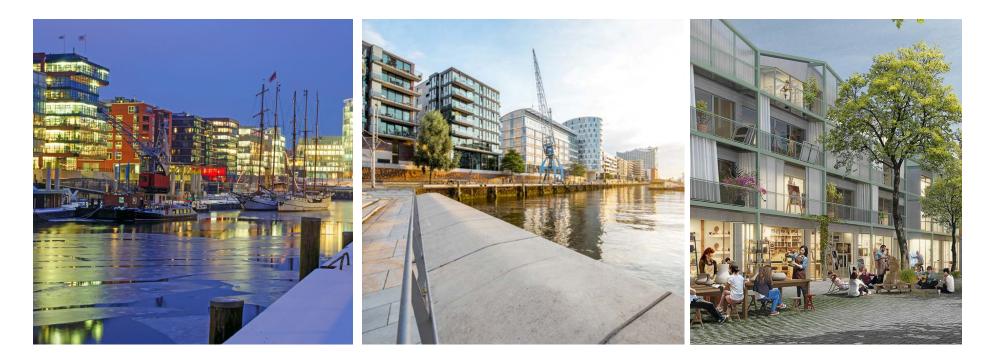


BKZ & MASHTROF



Residential neighborhood that is located near the Bucha River. It is located at the gateway of Irpin from Bucha.

This is the area where an Innovation District is proposed with the aim to drive innovation and economic growth and become a hub for entrepreneurship, research, and technological development.



WRITERS PARK & PARK CENTRALNY



Irpin's oldest neighborhood. It currently has no efficient access from the east end of the train station and is completely disconnected from the west end of Irpin, as it sits right by the railroad track. It contains the largest park in the city, high end multi- family housing, restaurants, etc.



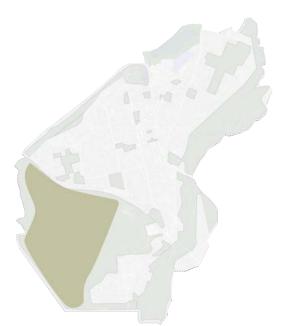
AKADEMIYA



This neighborhood is home to the State Tax University & the Temple of Saint Nicolas the wonderworker of OCU. Rapidly developing, densely populated, it contains new housing projects



ΡΟΤΟΚΥ



This is a national reserve. Has the potential to become a landscape park and a refuge for wildlife



HEART OF IRPIN



This is the business centre of Irpin, which was completely reconstructed in 2016. It includes parks, sports center and music school. There is a large Azerbaijan diaspora in this neighborhood.



VODOKANAL, ROMANIVKA & STOYANKA



Located at the gateway to Irpin from Kyiv and is surrounded by the river on the east end and the forest on the west end. The neighborhood is home to significant monuments and tourist routes and has the largest concentration of private residences. Has potential to extend towards the riverfront and build more housing.





Conclusion

STRATEGIC VISION PLAN

PAGE 115

NEXT STEPS A Look Ahead

Strategic Framework Plan

The current phase of the effort, reflected in this document, is a Strategic Framework plan. This plan captures the goals established for the rebuilding, planning strategies and initial concepts which amplify City's natural assets, reflect projected growth and development.

Fee: pro-bono Timeframe: 4 months

Conceptual Master Plan

This plan will extend into a conceptual masterplan, which will rely on a thorough survey of the city, validate goals established in the Strategic Framework Plan and apply our planning approaches to generate a full plan for rebuilding and expansion of Irpin. This stage is contingent upon funding.

Estimated fee: \$500,000 Timeframe: 6 months

Detailed Master Plan

The final phase of master planning will consist of a detailed masterplan, integrating a detailed analysis and proposal for infrastructure and transportation.

Estimated fee: \$250-500,000 Timeframe: 6 months

All efforts conducted within the planning process rely on partnership and close coordination with the City's leadership, residents, local experts, and international experts.

NEXT STEPS Collaboration Partners

IRPIN

City of Irpin

Oleksandr Markushyn Mayor of Irpin

Volodymyr Karpliuk Head of Investment Council, IRS

Mihaylo Sapon Chief Architect of Irpin

IRS Team

Iryna Yarmolenko Advisor to the Mayor, IRS

Domenico Vito Project Manager, Climate Advisor, IRS

Oksana Nechytailo Advisor to the Mayor

GENSLER

Robert Peck Government & Defense Leader

Mark Erdly Cities and Urban Design Leader

Nadia Volchansky Strategist

AGENCIES

United Nations UNECE World Bank

GLOBAL PARTNERS

Architecture

Stefano Boeri Architetti (Italy) Green Building Council of Italy Architekt (Austria) Layer (Albania) Thought Group (Chile) WZMH Architects (Canada) INterland Paris (France) MADMA Urbanism+Landscape (Netherlands) Valerio Berruti (Italy) Thoralf Niehus (Germany)

Policy

Tirana City Mayor (Albania) Cascais City Council (Portugal) Milan City Mayor (Italy) Alba Council of Tourism (Italy)

Ukrainian Experts

Druid Project Bureau (UA) Advansus Companies Gorup (UA) UA Eurointegration Platrofm (GB) Design & Decor (UA) Project APENA3 (UA) Volodymyr Nalbat, Architect (UA) Sofiya Dziubliuk, Web Design/CGI (UA)

Project Management / Advisory

University of San Diego Peacebuilding Advisor (USA) TDH (Italy) APF France Handicap (France) Centro Inteligencia Territorial Design Lab (Chile) European Climate Foundation UA (Luxembourg) Covenant of Mayors UA Expert (EU) Chatham House (GB) UNDP UA (TBC) BETEN International (France) Committee Razom (Italy) APF France (France) Nat'l Council of EU and Int'l Policies

Individuals

lan McKay, Atty (Peru + USA) Dmytro Konovalov, Investment Banking (Canada) Serge Widawski Patrice Tripoteau lvetta Delikatna, Strategic Comm (GB) Irya Lond, Entrepreneur (GB)

Gensler