



# SUKARIA

Take a look at Kota Kita's co-design process  
in designing child-friendly streets!





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## About Sukaria

Many public spaces in Indonesian cities are inaccessible to vulnerable groups such as children, older people, and people with disabilities, due to limited inclusive infrastructure and a lack of public understanding of the challenges faced by vulnerable groups. The situation is compounded by the fact that children's voice are often not involved in decision-making processes because of the assumption that children do not yet have the capacity to convey their aspirations; children tend to be considered as objects of a policy or program, rather than as actors of change.

The SUKARIA (*Surakarta Kota Ramah dan Inklusif untuk Anak*, in English: Surakarta Friendly and Inclusive City for Children) program exists to provide a safe space for children to voice their opinions while introducing them to the concepts of safety and inclusivity. By actively engaging children, this program aims to connect children and the surrounding environment by co-designing safe and comfortable street around Muhammadiyah 1 Surakarta Junior High School , Flores Street, and Nusa Penida Street in Kampung Baru Neighborhood, Pasar Kliwon, Surakarta (Solo).





## Who are **involved?**



**GDCI** is an institution committed to reimagining streets as spaces for society, creating cities that are safe, healthy, accessible and just for everyone. In this program, GDCI acts as an expert partner and technical planner as well as the organizer of the 'Street for Kids' program which is also implemented in 9 other cities in the world, namely Abuja in Nigeria, Cuenca in Ecuador, Istanbul in Turkey, Leon in Mexico, Lima in Peru , Lusaka in Zambia, Recife in Brazil, Santiago in Chile, and Tire in Lebanon.



**Kota Kita** is a non-profit organization based in Solo City. Kota Kita has expertise in the field of urban development and citizen participation. Kota Kita is the main implementing organization of the 'Street for Kids' program in the City of Solo.



**The City Government of Surakarta**, especially the **Department of Transportation (DoT)**, is the key partner in the design and implementation process of the 'Street for Kids' program in the City of Solo. Policy direction and technical expertise can improve program implementation strategies that are in line with the vision and mission of the City of Solo.



**Muhammadiyah 1 Surakarta Junior High School** is one of the main beneficiaries of the 'Street for Kids' program. The involvement of teachers and students at Muhammadiyah 1 Surakarta Junior High School is important considering that this program aims to create a safe and comfortable space for children.







**3** Interview and Site Observation



To better understand the context and issues of the surrounding environment, we conducted field observations and interviews, especially with stakeholders from Muhammadiyah 1 Surakarta Junior High School as well as representatives of residents.



The observations focused on the street users and their activities, particularly during school entry and exit hours. At these times, there is a high volume of street users, including students, parents' vehicle dropping off and picking up students, other passing vehicles, street vendors on both sides of the street, and some parked vehicles occupying half of the street.



The survey also incorporated both quantitative and qualitative aspects with the assistance of surveyors. The collected data included the number of street users and activities map within the street corridors before and after the implementation to assess the impact of this initiative.





## Co-designing with children

Centered on children's perspective, this initiative actively engaged students of Muhammadiyah 1 Surakarta Junior High School and neighborhood children through co-design workshops held in March 2023. This activity was carried out in a participatory manner and incorporated creative and engaging tools tailored for children such as illustrated maps, stickers, toy figures and other handicraft materials — creating a safe and fun space for children to voice their aspiration. The ultimate goal is to collaboratively design a street environment that is child-friendly, safe, and comfortable for all.



### 1 Understanding the journey to school

The illustrated maps and photos provided context to children and helped them to navigate the surrounding environment.

Using the maps and sticker for journey mapping activity, children were encouraged to identify which street corridors they use and what mode of transportation options they use for their journey to and from school.





## 2 Identify the problem

After gaining better understanding on the spatial context, children were asked to identify challenges they often see within the street corridors. We used maps and photos to facilitate and encourage children to express their opinion. Additionally, we also invited neighborhood's children to conduct a child-led tour along Flores Street and Nusa Penida Street with a photo story activity to capture and identify their likes and dislike about their neighborhood.

## What do the children say?

*"The street is uneven, there are potholes"*



*"A house with lots of plants looks pleasant"*



*"This wall has a lot of moss and is dirty so it looks scary when you pass by"*



*"There's a lot of rubbish and unused items on the side of the street, so it's quite disturbing"*



*"This street vendors occupies the street situated on the corner of the junction so it disturbs passing vehicles"*



*"The speed bumps are too high"*





## What do the children say?

*"The street is very busy, especially after school because lots of motorized vehicles are coming from opposite directions. There are also many street vendors on both side of the street."*

*"There is no comfortable place to wait for my parents to pick me up in front of the school and the weather is very hot during the day"*

*"I'm often scared of crossing, especially on big street like Jendral Sudirman Street. There are lots of speeding vehicles."*





### 3 Design solutions with children

In the design solution activity, children become kids planner who come up with physical design intervention to address the identified problems. The activity encourages children to participate meaningfully through the use of illustrated maps, toy figures, and handicrafts.

The tools enabled children to visualize their design idea and allow them to create a model design by assembling the tools with their own creativity and to place the model design in the location they want on the map.

Children also had the opportunity to share their ideas with each others.

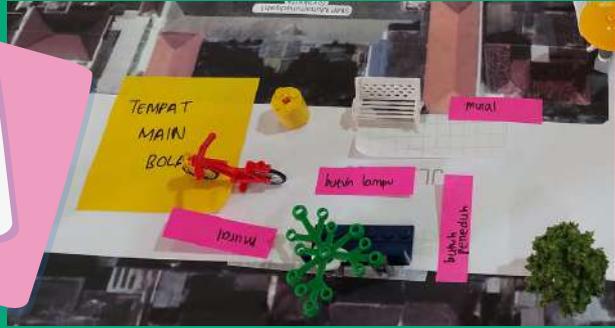
## What do the children say?

"A comfortable seating area with shading to wait when parents are picking us up."



# What do the children say?

"The road can also be used as a playground, but it must be closed temporarily to ensure safety."



"Establish one way system for the street in front of the school only during school entry and exit times, to avoid traffic jam."

"There should be clear signage for crossings and dedicated officers who help cross the road."



# What do the children say?



"A dedicated path for pedestrians that is comfortable and safe from motorized vehicles"

"Wall mural to enhance the street corridor so it doesn't look scary."



"Street vendor should not disturb the traffic flow, especially on Flores Street during peak hours."





## Dissemination of children's ideas

The co-design activities with children explored challenges and exciting design solution ideas for the targeted location. Our team at Kota Kita consolidated children's ideas into an initial design plan to share with relevant stakeholders before the implementation phase. A multistakeholder workshop was conducted to present the initial child-friendly street design and gain input to finalize the design. This activity also allowed stakeholders, particularly the government sector, to validate the initial design, thus ensuring its alignment with existing regulations and standards.

Government officials, private sector, and community representatives were engaged in the discussion. Other organizations, such as DPO (Disabled People's Organization) and the Children's Forum, also participated.

We also organized public consultations at the neighborhood level to present the design result and implementation phase planning and to gather the residents' input.



Multi-stakeholder workshops and public consultations



# Final design for child-friendly street



Based on the feedback collected throughout the participatory process involving children, government, private sector, organizations, and residents, the child-friendly street design located on Flores Street and Nusa Penida Street in Kampung Baru neighborhood aims to create a safe and comfortable street corridor with the following concept:



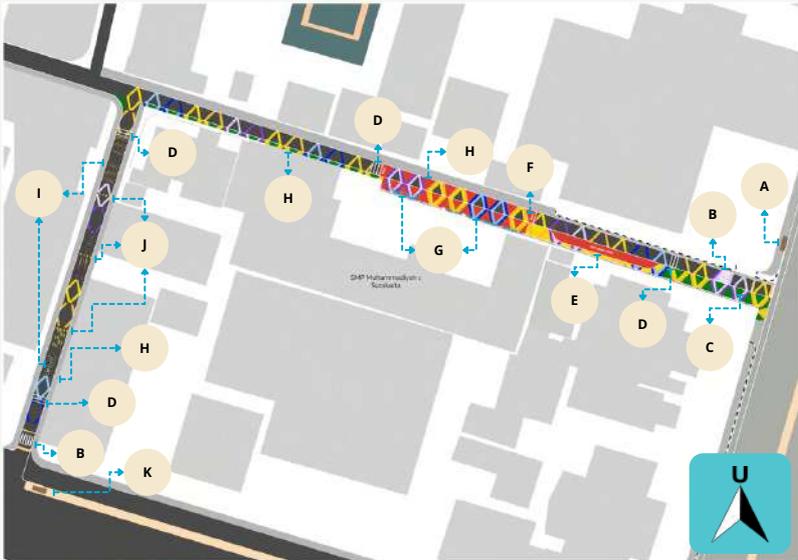
**Redesigning Street Zoning and Elements**



**Creating Comfortable School Shelter**



**Creating Interactive Space through Mural**



**Legend:**

A. Post Office Bus Stop  
B. Pedestrian Crossing  
C. Road Painting

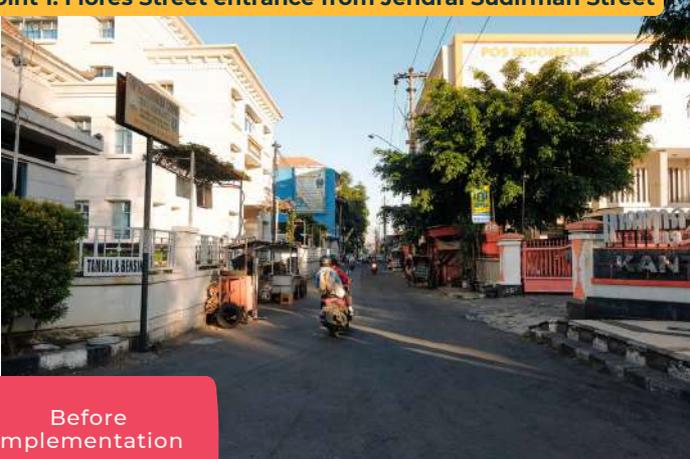
D. Rumble Strips  
E. Drop Off Zone  
F. School Zone

G. School Shelter  
H. Mural on the Wall  
I. Children Games Mural on the Road

J. Rubber Speed Bumps  
K. Gladag Bus Stop



**Point 1: Flores Street entrance from Jendral Sudirman Street**



Before implementation

- Street signages (i.e. prohibition, warning and guidance signs)
- Wayfinding to the Post Office Bus Stop
- Additional pedestrian crossing facility



Curb extension painting aims to prompt the drivers to reduce the vehicle speed while making turns

Road painting and marking with patterns and bright colors enhance visibility for users



**Point 2: Drop off and pick up zone on Flores Street**



Before implementation

Drop off and pick up zones for motorbikes during school entry and exit hours

Wayfinding to the bus stop



Implementation plan

Road painting with a dominant green color is dedicated for pedestrian path

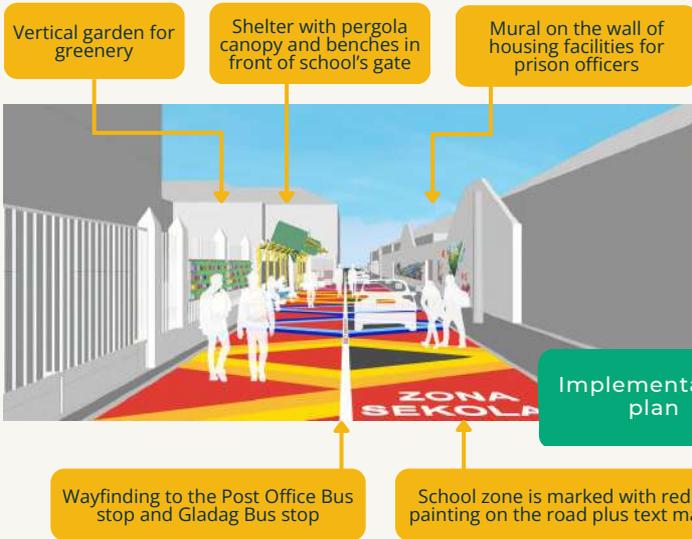
Explicit delineators with white marking and pattern variation to direct the vehicle flow



Point 3a: Flores Street in front of the school gate



Before implementation



Point 3b: Flores Street in front of the school gate



Before implementation

Semicircular benches in front of school to accommodate students' interaction

Adding climbing plants on top of the pergola-canopy as a shading



School zone is marked with red color painting on the road

Implementation plan



Point 4: Flores Street next to the school wall



Before implementation

Educational themed mural



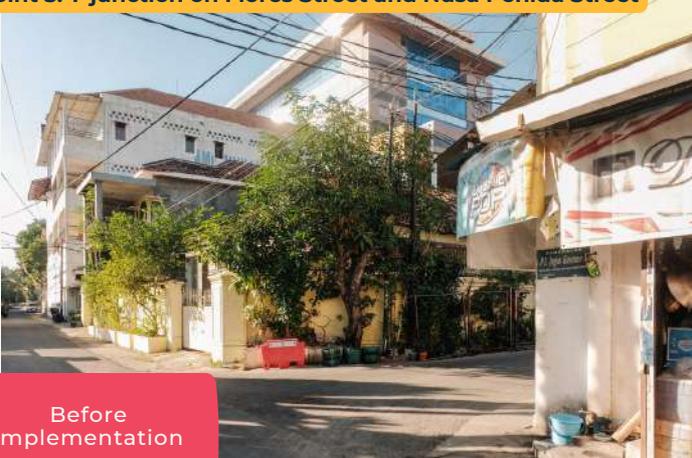
Implementation plan

Dedicated pedestrian path

Wayfinding to Gladag Bus Stop



Point 5: T-junction on Flores Street and Nusa Penida Street



Before implementation

Prohibition sign to manage one-way street system on designated times

Implementation plan



Wayfinding to Gladag bus stop

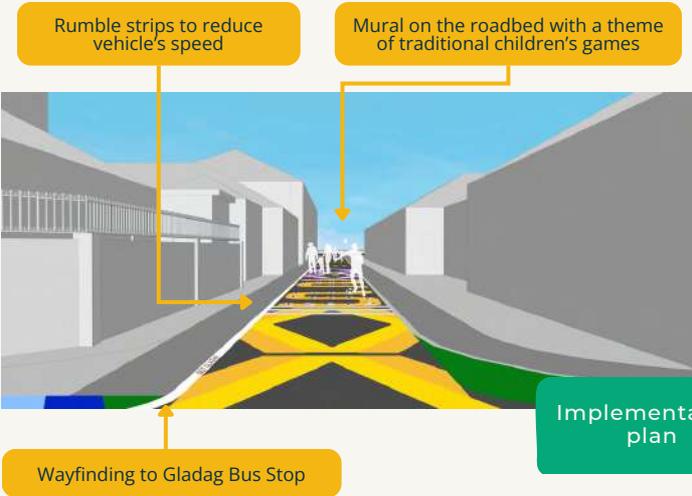
Dedicated pedestrian path



**Point 6a: Nusa Penida Street Corridor**



Before implementation



Rumble strips to reduce vehicle's speed

Mural on the roadbed with a theme of traditional children's games



Wayfinding to Gladag Bus Stop

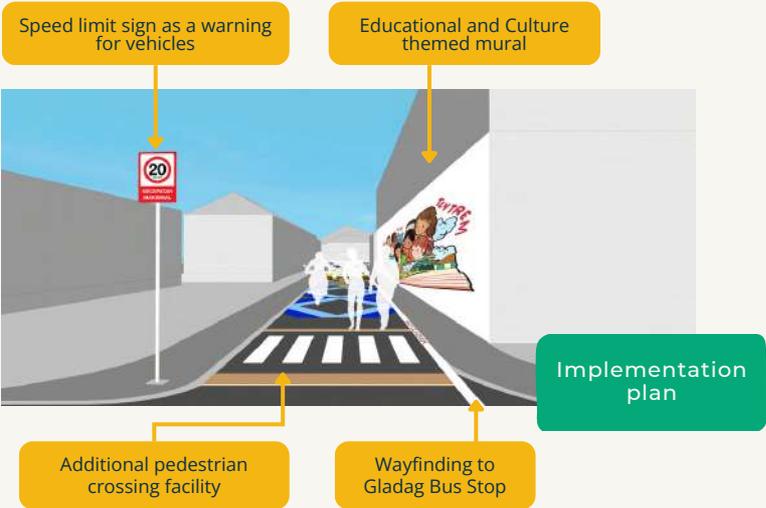
Implementation plan



**Point 6b: Nusa Penida Street Corridor**



Before implementation





## Participatory Mural with children



In October 2023, we invited children in Kampung Baru Neighborhood to see the results of their designs in the Flores and Nusa Penida Street corridors.

In addition to that, they actively participated in coloring and drawing wall murals on Nusa Penida Street. We also collaborated with local artist *Young Surakarta* to facilitate participatory mural activities.

Even though it was a hot and sunny day, the children were still enthusiastic about coloring the wall mural. We hope that this process can foster a sense of togetherness and concern for the environment where they live.





## How did we share the results of **SUKARIA** implementation?

The inauguration for the child-friendly street around SMP Muhammadiyah 1 Surakarta which took place on October 26th, 2023 was attended by the Surakarta City Government, schools, private sectors, local residents and other related stakeholders.

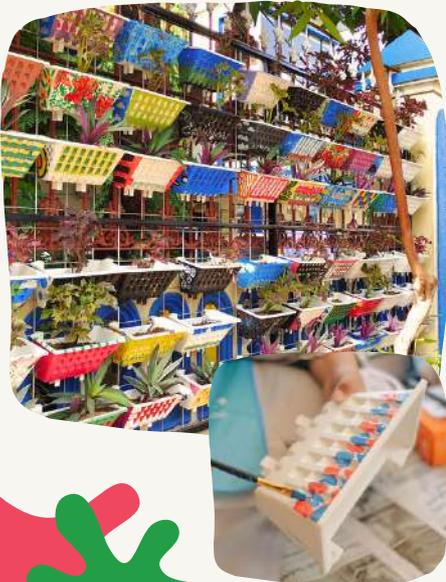
As part of the activity, stakeholders walked along Flores Street and Nusa Penida Street using a reverse periscope to see the results of the implementation designed by the children. Crafted from cardboard and mirrors, reverse periscopes allow adults to see the street from a child's perspective and height. This tool is an initiative of the Global Designing Cities Initiative (GDCI) which can be adapted by various groups.



A Walking Tour on Flores Street and Nusa Penida Street using a reverse periscope







### Co-painting planter box with students

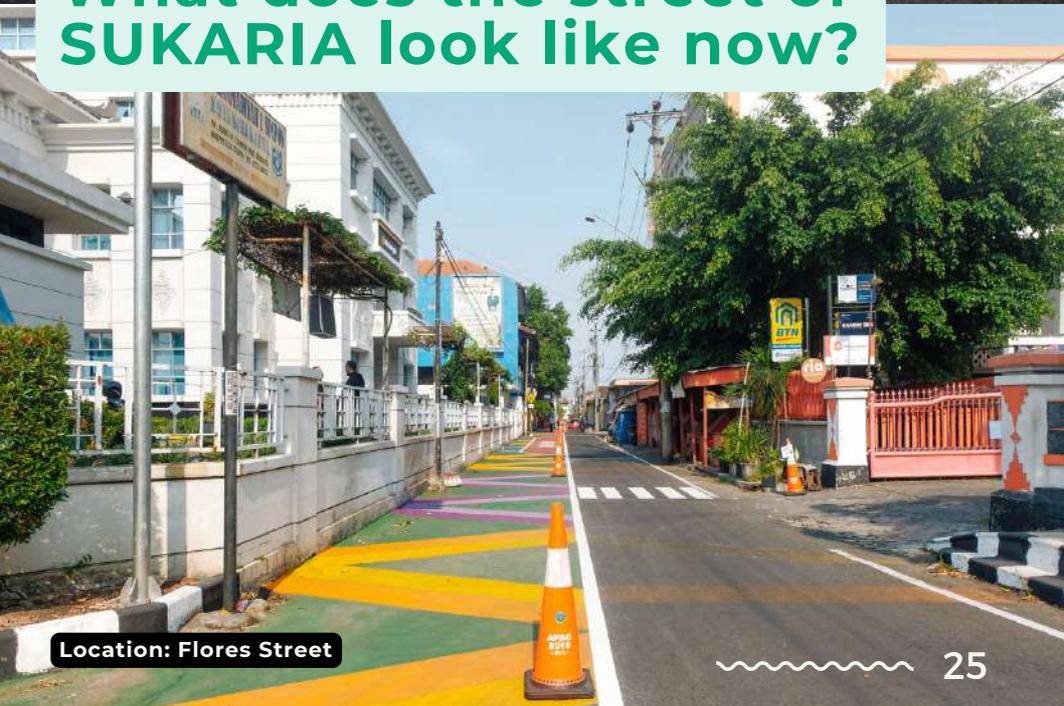


To increase the sense of ownership of the child-friendly street surrounding SMP Muhammadiyah 1 Surakarta, we invited student representatives to contribute to the activity of painting planter box that will decorate the school fence. The concept and design of the painting on the planter box was the idea of the students. Teachers and local artists also guided the painting process.





What does the street of SUKARIA look like now?



Location: Flores Street



Before



After



Drop Off Zone on Flores Street

Before



After



School Zone on Flores Street

Before



After



School Shelter in front of the school



Before



After

**Pergola-Canopy with Semicircular Benches in front of the school**



Before



After

**Mural on Housing Facilities of prison officers' Wall, located in front of the school**



Before



After

**Mural on School's Wall**

Before



After



Road Painting on Nusa Penida Street

Before



After



Mural on resident's Wall and children's games painting on Nusa Penida Street

Before



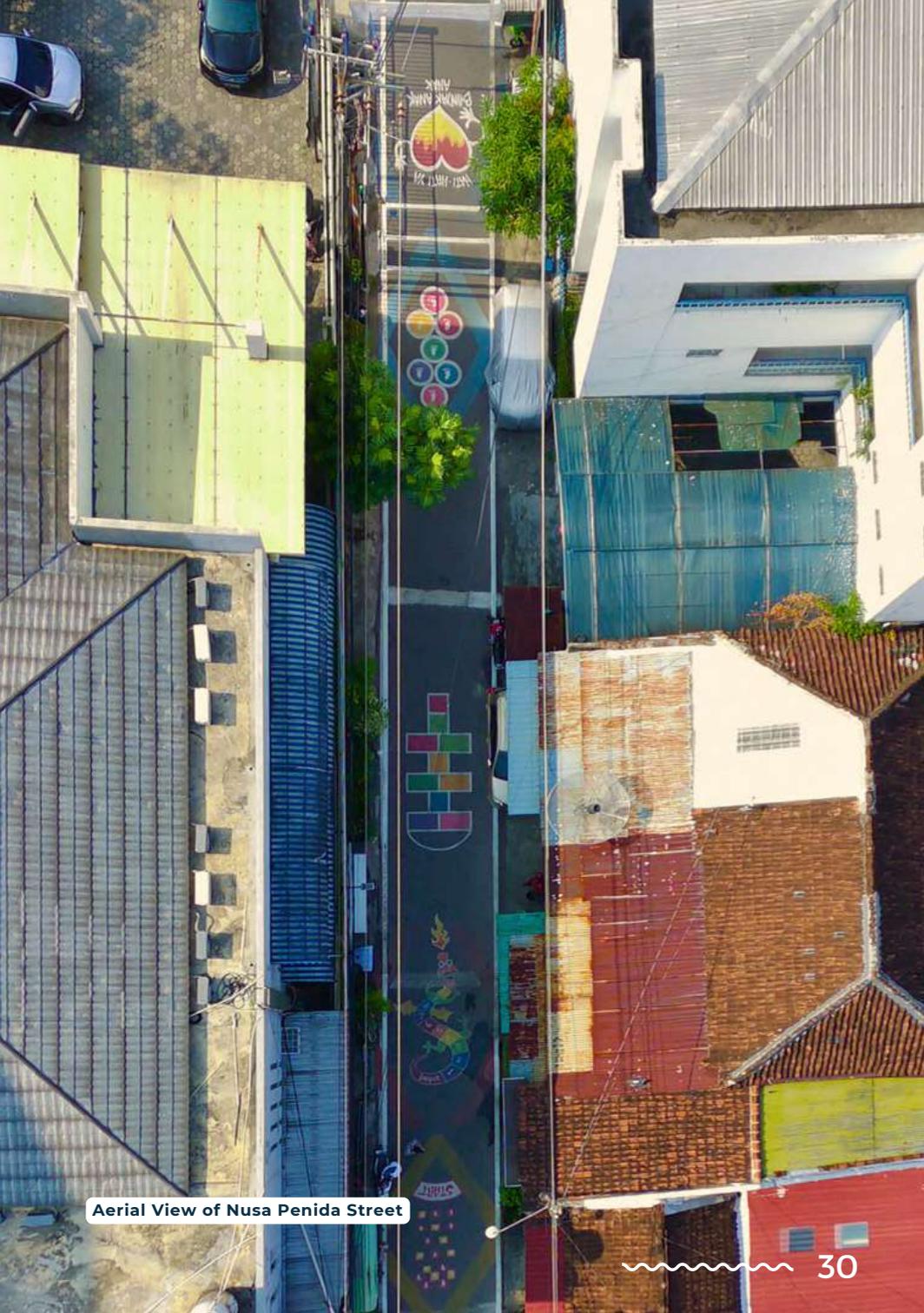
After



Nusa Penida Street entrance from Slamet Riyadi Street



Aerial View of Flores Street



Aerial View of Nusa Penida Street



## Lessons Learned

The participatory process in this child-friendly street pilot project provided a clear example of the importance of considering children's voices in city planning.

By actively involving children as decision-making actors, the resulting child-friendly street design can accommodate children's needs based on their views and the local context at that location. Involving children enhances the effectiveness of urban planning to meet their needs. Apart from that, participatory methods that use creative tools such as maps, photos, toy figures, and murals allow children to participate actively in a fun process. This method shows them that their voices can also positively change the environment.

Of course, the planning to implementation process will only be successful with the support of all stakeholders. Therefore, collaboration and support from all stakeholders from the government, private sector, expert team, neighborhood, and community are vital to the success of this pilot project.

We hope this child-friendly street pilot project can provide a good practice that inspires other city planning initiatives to be more friendly and inclusive for children.



# Thank you

We thank:

- *Global Designing Cities Initiative (GDCI)*
- Surakarta City Government, especially the Department of Transportation, Regional Development Planning Agency, Department of Public Works and Spatial Planning, Department of Housing, Settlement Areas and Land, Department of Women's Empowerment and Child Protection as well as Population Control and Family Planning, Department of Education
- Class 1 Prison, Surakarta
- Pasar Kliwon District
- Kampung Baru Neighborhood
- Muhammadiyah 1 Surakarta Junior High School
- Surakarta City Muhammadiyah Regional Education and Primary Education Council
- Post Office of Surakarta
- Bank Indonesia Solo Representative Office
- Bank Bukopin KCU Solo
- Disability Advocacy Team of Surakarta City
- Surakarta City Children's Forum
- Residents of RW 01 Kampung Baru
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- Other stakeholders

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**KOTA**  
**KITA**  
A CITY FOR ALL

