Designing Streets for Kids

Global Virtual Launch | August 2020

@GlobalStreets
www.globaldesigningcities.org

NACTO National Association of City Transportation Officials
GDCI Global Designing Cities Initiative
Designing Streets For Kids - Introduction

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Designing Streets for Kids

Global Virtual Launch

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NACTO National Association of City Transportation Officials
GDCI Global Designing Cities Initiative
Largest network of continuous public space
Largest network of continuous public space

ONE OF OUR BIGGEST ASSETS IN CITIES!
We are killing kids slowly...
Around 127,000 children under age five die each year from outdoor air pollution worldwide.
We are killing kids slowly...
81% of adolescents (age 11 to 17) worldwide are insufficiently physically active.
We are killing kids quickly...
Globally, 500 children die each day from road traffic crashes.
Number 1 killer of ages 5-29 (WHO)
Endorsed by over 100+ Cities and Organizations
GSDG Translations

Portuguese
Chinese
Spanish
Italian
Russian
Japanese
From Global Agenda to Local Action

Inspire Leaders

Inform Practitioners

Empower Communities
What is Possible?
What is Possible?
What is Possible?
People: Design for All Street Users

- Pedestrians
- Cyclists
- Transit Riders
- Motorists
- Freight Operators and Service Providers
- People Doing Business
Design for More Functions
‘Expanding the Family’

Global Street Design Guide

Designing Streets for Kids
Designing Streets for Kids
OFFICIALLY LAUNCHED!!!!

Designing Streets for Kids
Pre-launch events (in person 😊)

World Urban Forum
Abu Dhabi, Feb 2020

3rd Global Ministerial Conference on Road Safety
Stockholm, Feb 2020
Streets for Pandemic Response & Recovery

https://globaldesigningcities.org/2020/04/03/covid-19-resources/
Streets for Pandemic Response & Recovery

https://globaldesigningcities.org/2020/04/03/covid-19-resources/
Working with Global Experts and Contributions

**Advisory Committee**
- 12 people
- 9 countries

**Expert Group**
- 116 people
- 125 countries

**Contributing Network**
- 132 people
- 39 countries
Designing Streets for Kids

GSDG Supplement

12 cities = training & technical assistance
Technical Assistance & Trainings for 12 cities

Technical Assistance
1. Fortaleza, Brazil
2. Santiago, Chile
3. Tirana, Albania
4. Kigali, Rwanda

Trainings
5. Lima, Peru
6. Udaipur, India
7. State of Colima, Mexico
8. Tbilisi, Georgia
9. Tulsa, USA
10. Cape Town, South Africa
11. Manila, Philippines
12. Kazan, Russia
Global Influences

60+ Case Studies/ Snapshots from 28 Countries
Streets for Kids

- Improved & Independent mobility
- Places to pause, sit, and play
An infant’s brain creates more than one million new neural connections every second.

(Adapted from Center on the Developing Child, Harvard University.)
The Street can Build Connections

- Between neurons
- Between child & caregiver
- Between children
- Between caregivers
- Between caregivers & children with their surrounding space
- Between caregivers & children and their destinations
Children’s Needs from Streets

Reliable mobility choices

Space

Visibility

Play and learning

Places to pause and stay

Social interaction

Security

A safe environment
Kids ‘contained’
Kids ‘contained’

Making kids VISIBLE in the city & streets
From surviving....
to thriving...
Slow vehicles by design

Disincentivize private vehicles and increase transit reliability

Add trees and green spaces

Build wide sidewalks and protected bike lanes

Improve pedestrian crossings

Think for 95 cm

Add places to play and learn
Working across multiple scales

City and Regional Planning
Neighborhood Scale
Block Scale
Detail Scale
Citywide policies
Safe and healthy

- Lighting that illuminates both sidewalk and street
- Safe Signals
- Posted speed limits
- Ramps
- Crosswalks

A clear path (> 2.4m wide)
Comfortable and convenient

- Trees for shade
- Street signs
- Access to nature, like small landscape gardens
- Solitary and social seating
- Wayfinding
- Lighting and awnings make facades dynamic
- Rubbish bins
Inspirational and educational

Nooks and variation in a building’s facade

Healthy food options

Artwork like playful numbers or murals

Painted additions to the sidewalk

Varied texture in surfaces
Pedestrian experience
Neighborhoods for Cycling

- cycle parking
- cycle-share station
- one-way cycle track
- two-way cycle track
- cycle street
- buffered cycle lane
- counterflow cycle lane
Streets for Kids: Streetscape
Bicycle Infrastructure

1. Wide, Protected Facilities
2. Safe Intersections
3. Complete Network
Neighborhoods for Transit

- dedicated bus lane
- bus route
- light rail transit (LRT)
- transit street
- bus rapid transit (BRT)
- informal transit
- stops & stations
Streets for Kids: Streetscape
Transit Infrastructure

- Shelter
- PLAY+ LEARNING
- Wayfinding
- Accessible
- Seating
Street Design Strategies

Upgrade: Meeting minimum standards
Protect: Design for safe speeds
Reclaim: Efficient and fair distribution of space
Activate: Incorporate places to pause, sit and play
Extend: Think beyond the ground plane – Street as a ‘room’
Street Design Strategies

Upgrade
Meeting minimum standards

Protect
Design for safe speeds

Reclaim
Efficient and fair distribution of space

Activate
Incorporate places to pause, sit and play

Extend
Think beyond the ground plane – Street as a ‘room’
Upgrade

Nairobi

Credit: Amend
Street Design Strategies

Upgrade
- Meeting minimum standards

Protect
- Design for safe speeds

Reclaim
- Efficient and fair distribution of space

Activate
- Incorporate places to pause, sit and play

Extend
- Think beyond the ground plane – Street as a ‘room’
Protect/ Slow

Fortaleza

Credit:NACTO-GDCI
Fortaleza
Protect/ Slow
Protect/Slow

Paris

United Kingdom (mph)

Christchurch, New Zealand

30

20

30

Speed Reduction / 30km/h
Street Design Strategies

Upgrade
- Meeting minimum standards

Protect
- Design for safe speeds

Reclaim
- Efficient and fair distribution of space

Activate
- Incorporate places to pause, sit and play

Extend
- Think beyond the ground plane – Street as a ‘room’
Street Design Strategies

Upgrade
- Meeting minimum standards

Protect
- Design for safe speeds

Reclaim
- Efficient and fair distribution of space

Activate
- Incorporate places to pause, sit and play

Extend
- Think beyond the ground plane – Street as a ‘room’
Activate

Copenhagen
Activate

São Paulo

Credit:Cidade Ativa
Activate

São Paulo

Credit:Cidade Ativa
Street Design Strategies

Upgrade: Meeting minimum standards

Protect: Design for safe speeds

Reclaim: Efficient and fair distribution of space

Activate: Incorporate places to pause, sit and play

Extend: Think beyond the ground plane – Street as a ‘room’
Extend

Bogotá, Colombia
Street Transformations
Streets Near Key Destinations
Streets Near Key Destinations

Before
Streets Near Key Destinations

After
Streets Near Key Destinations
Case Study – Milan, Italy
Streets Near Key Destinations
Case Study – Fortaleza, Brazil
Streets Near Key Destinations

Case Study – Fortaleza, Brazil
Streets Near Key Destinations
Case Study – Fortaleza, Brazil
Residential Streets

Before
Residential Street
Copenhagen, Denmark
Commercial + Mixed-use Streets
Before – Option 3 – Transit-priority Street
Commercial + Mixed-use Streets
After – Option 3 – Transit-priority Street
Commercial + Mixed-use Streets
Case Study – Ljubljana, Slovenia
Commercial + Mixed-use Streets
Case Study – Ljubljana, Slovenia
Large Thoroughfare
Before
Large Thoroughfare

After – Option 1
Large Thoroughfare
After – Option 2
Large Thoroughfare
After – Option 3
Large Thoroughfare
Before
Large Thoroughfare
Case Study - Moscow, Russia
6.1 Build a Plan for Implementation

The steps below can help make cohesive change towards child-friendly streets. These actions can be applied to an individual street design project or to influence a formal citywide action plan. While city governments hold the most power to change the status quo of street design, there are various entry points to invigorate the conversation and catalyze change, from nonprofits and foundations to community advocates.

- Cross-pollinate city departments
- Understand the local context
- Start with a vision
- Engage stakeholders
- Identify champions
- Identify impactful projects
- Measure, maintain, and program
- Scale up and institutionalize success
- Tell your story

Align with existing efforts
- Get inspired and learn from other cities
- Demonstrate progress and results
- Cross-pollinate city departments
- Understand the local context
- Start with a vision
- Engage stakeholders
- Identify champions
- Identify impactful projects
- Measure, maintain, and program
- Scale up and institutionalize success
- Tell your story

Create great streets for kids requires a holistic approach and alignment with other local projects, programs, or initiatives with similar goals. Work together with other teams to align efforts and resources while minimizing impact. Examples include mobility plans and other guidance documents, incorporating child-focused planning strategies, and street furniture programs that include designs for children or school improvement projects that might extend to include adjacent streets.

[Diagram]
Taking a Comprehensive Approach

Streets for Kids at the Center

- People
- Policies
- Projects
- Processes
- Programs

STREETS FOR KIDS
Scaling Up
Updating Policies

National

Regional

City/ Local
Engagement Tools and Methods

6.4 | Engagement Tools and Methods

Engaging children should be at the forefront of a collaborative approach to designing better streets among all interested stakeholders. However, most cities fail short when engaging children consistently and meaningfully. Below are some ideas for tools and methods that can be used to gather children’s and caregivers’ insights throughout different steps of the process. There are no one-size-fit-all solutions, and engagement strategies can range from informal conversations, walks, and play to drawings, model building, role playing, mapping, and photo stories.

Consider working with local schools to scale up the engagement and make sure to include different languages in multilingual communities.

**CHILD-TO-CHILD**
Older children can help younger children learn about road safety and street improvements through guided workshops and tours.

**JOURNALING**
Encourage kids to keep a journal. For example, ask kids to document how they travel to school, the paths they take, and how long this takes.

**STREET AUDIT**
Do a street audit with children and caregivers. Compare their differences and discuss key challenges and potential solutions.

**PHOTO STORY**
Ask children to take pictures of places they see and things that need to be improved on their local streets. Share and discuss their findings.

**CHILD-LED TOURS**
Children are passionate about the places where they live. Let children lead and show what works and what doesn’t.

**VISUAL SURVEYS**
Use a visual preference survey to gauge results. Make it accessible for those who cannot read.

**MAPPING**
Help identify and prioritize sites, routes, and mobility areas. Use large-scale maps to document children’s environments.

**ART AND PLAY**
Use drawings to engage people of any age, especially kids from ages 5 to 11. Re-purpose materials such as cardboard boxes, straw, toys, boxes, and branches to create models of neighborhoods to use for street design exercises.

**TECHNOLOGY**
Help children to create with adults, for example by using computer games such as Minecraft or SimCity.

Ask children to report poor road conditions and document their ideas online by walking and biking via gamified apps.

**INTERVIEWS, FOCUS GROUPS, AND SURVEYS**
Conduct interviews and surveys, and organize focus groups before and after project completion. Use these tools consistently to understand where changes are needed.

**CHANGE PERSPECTIVE**
See a street from a child’s or caregiver’s perspective to better inform a meaningful discussion. This can be through a different viewpoint (for example, 30 cm, the height of an average three-year-old), place, safety perception, and more.

**OBSERVATIONS AND COUNTS**
Understand how the street is used and who the users are with qualitative counts.

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**Pick the right place and time**

When planning engagement activities for kids and caregivers, pick locations that are close to the project site and convenient to access. Meet children and caregivers at locations where they already are spending time such as schools, grocery stores, and events.

Consider what hours will allow people to participate, including school and work hours and schedules related to family with small children, teenagers, older adults, and pregnant people. Provide childcare and compensation when possible.

**AT SCHOOL**

**AT THE GROCERY STORE**

**AT THE LIBRARY**

**AT HEALTHCARE FACILITIES**

**AT THE PLAYGROUND**

**AT THE PARK**

**AT OPEN STREET EVENTS**

**ON THE SPORTSFIELD**

**AT COMMUNITY EVENTS**
6.5 Demonstrate Possibilities

Challenging the status quo can be difficult, and it may be hard for people to imagine their streets differently or to convince them that change will bring positive impact. Demonstrating what is possible can help cities and practitioners build support for their projects. Pop-up and interim transformations are opportunities to move from ideas to practice, test design strategies, and identify quick wins. These projects can be powerful ways to quickly demonstrate how streets can bring safer mobility and play while building support for long-term change.

Effective strategies to demonstrate what’s possible

Give Space Back to People

In many places, kids do not have opportunities to play safely in public space. Therefore, removing or reducing vehicles can be a powerful way to show how streets can be used by children to play immediately. Consider pop-up and interim interventions as a means to gain support for a permanent change. These interventions alone should not be used as a substitute for permanent or long-term space or facilities for children and caregivers.

Focus on the first goal and select interventions accordingly. Children may be the first ones to occupy a transformed space. Kids, caregivers, and families quickly realize the hidden opportunities of transforming streets and reclaiming space for walking, rolling, and playing.

Get Partners on Board

Pop-ups and interim transformations require multiple partners and buy-in from the local community. Designers and engineers from city agencies should contribute to the design and evaluation of the intervention. As important as local civic society organizations, universities, advocates, and community members, including children, who can help plan and implement interventions.

Champions from city agencies can help by planning the process, identifying key stakeholders, and identifying opportunities for partnerships. Plan launch events with key stakeholders—from high-level politicians to local residents, including children—and invite them to the event so that they can see the event and spread the word about the success of the intervention.

Implement Quickly and at Low Cost

Use signs, chalk, paint, and moveable furniture such as beach chairs and plants. These changes can be time-sensitive by city professionals and community members. Testing streets as if new interventions can be an effective and efficient way to make design decisions and achieve consensus among city agencies.

Pop-ups and interim transformations can be more successful by including programming. Consider music, dance, and other performances; classes and workshops; open air cinemas; food vendors; and other engaging and fun activities.

Measure and Make the Case

Use data and anecdotes to communicate a project’s success and gain support from the public and from city stakeholders.

See appropriate indicators for evaluating baseline scenario and post-intervention data. Monitoring and evaluating both the process and the final outcome will offer valuable input for future projects.

Maintain and Manage

Streets require ongoing maintenance and management. Identify who is taking care of plants, street furniture, and other amenities and where they are stored.

Iterate and Share Lessons Learned

Build in a flexible planning process so that each location can continue to evolve and value based on the context, most robust evidence emerging from practical experience and ongoing scientific studies.

Common tools to create successful pop-ups and interim projects

Chalk and paint materials, seating, chairs, tables, umbrellas, etc., games, playable structures, and toys, programming such as music, walking tours, health check-ups, etc.

Cidade 2000

Labeira, Fortaleza, Brazil

Implementation organization: City of Fortaleza, State of Ceará, NACTO-GDDC, World Resources Institute

Overview

As part of the plan to implement a slow speed zone in the Cidade 2000 neighborhood, Avenida Central was completely transformed over two nights. More than 1,300 volunteers and 100 volunteers transformed a side street where people can walk, visit, and spend time together. A narrow travel lane preserves local access for motor vehicles, allowing for delivery of goods, pick-up and drop-off, and some parking. Three new pedestrian crossings were introduced, giving clear priority to pedestrians. Together, these measures encourage vehicles to move at safer speeds and enhance safety and comfort for street users.

In the new space, children have a place to play, neighbors of all ages and abilities have new benches where they can sit and talk, cyclists have a safer route to ride, and local businesses have new customers. Immediately after the transformation, the features were painted over as the sea of asphalt became the new face of the neighborhood.

In an innovation trial, artists, a local business owner and a local architect designed and built a permanent transformation with capital improvements. The project is expected to become a citywide public space program.
7.6 | Measure Impact

Measuring and monitoring the impact of a project or program is important to make a case, know what works, build support, and secure funding for longer-term change. Metrics should include quantitative and qualitative evaluation, and be completed before, during, and after project implementation. Measuring physical and operational improvements can demonstrate short-term progress as well as long-term success, and the impact of multiple projects, programs, and policies can be measured at a neighborhood or citywide scale.

For more information, see Appendix D and Global Streets Design Guide Chapter 3.

Curieuzeneuzen Vlaanderen/ Citizen Science
Location: Flanders, Belgium
Implementing organization: University of Antwerp
Timeline: May 2018

OVERVIEW
Curieuzeneuzen Vlaanderen is a citizen science project in which 20,000 citizens measured the air quality near their houses during May 2018. The effort led to acquiring a detailed map of air quality in Flanders, a region in Belgium, in both cities and the countryside. Participants installed a simple, standardized measurement device on a street-facing window of their residence to measure the mean concentration of nitrogen dioxide (NO2), an important indicator for traffic pollution. Air quality survey significantly over short distances, especially due to the street carnet effect, by which pollution levels increase by 2–4 times just meters away from a motor vehicle compared to traffic-ventilated streets with more motor vehicles. Because of this, citizen surveys can reveal the true impact of air pollution on property values as property values are measured to property assess the predictive capacity of the air quality model. Results from citizens are extremely valuable to gather through data on the spatial distribution of air quality.

Routes to School
Location: Mexico
Implementing organization: Ligo Pedestrian, Bernard van Leer Foundation
Timeline: 2017–present

OVERVIEW
Ligo Pedestrian (PioneerNet League), an organization focused on safe routes to school, created an online tool that helps communities assess safety in school surroundings through an interactive map, understand changes needed in infrastructure, implement physical improvements, or implement programs and engage with local authorities. The website also serves as a tool for employers communities. It offers three different audiences for accessing road safety for very detailed investment and management strategies. This comprehensive knowledge can lead to a further increase in the financial resources about potential projects to implement, including “School To School,” “Walking Bus,” walkways widening, and furniture making.

Communities can tap into project implementation processes, including official approvals needed and recommendations for designing campaigns or engaging demonstrations. Caminando de la Escuela (Routes to School) also has an online library with data, templates for official documents, and policy information. By sharing detailed but also clear information and recommendations, this guide is a powerful tool to call citizens to action.
Provide the tools to **reimagine, reinvent, and redesign safer, more sustainable streets**!
Provide the tools to reimagine, reinvent, and redesign safer, more sustainable streets!
Designing FOR kids
Designing WITH kids
Designing FOR kids
Designing WITH kids
Designing FOR kids
Designing WITH kids
DESIGN STREETS THAT PUT KIDS FIRST!

@GlobalStreets
#Streetsforkids
BUT BE WARNED!!
Gossiping
Thank you!

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