

## RURAL URBAN CONNECTIONS TOOLKIT

A PRACTICAL HANDBOOK FOR STRENGTHENING RURAL AND URBAN CONNECTIONS

# TABLE OF SHUBLE OF SHUBLE SHUBLE SHOWS THE SHUBLE SHOWS THE SHUBLE SHOWS THE SHOWS THE

Part 1  01. The changing realities of rural and urban territories
<b>02.</b> The costs of car dependence4
<b>03.</b> Understanding rural identity and daily rhythms5
<b>04.</b> Movement patterns and desire lines6
<b>05.</b> Beyond the Urban areas as learning labs7
<b>A.</b> Communities shaping future mobility11
<b>B.</b> Functional areas connected through integrated public transport15
<b>C.</b> Rural-urban areas where active mobility is normal21
<b>01.</b> Understanding the local context29
<b>02.</b> Stakeholder engagement and community building30
<b>03.</b> Co-creation and participatory design31
<b>04.</b> Experimentation and pilot projects32 <b>05.</b> Defining actions, roadmaps and
measurement33
<ul><li><b>06.</b> Impact measurement34</li><li><b>07.</b> Policy Integration and scaling34</li></ul>

# **EXECUTIVE SUMMARY**

Across Europe, rural communities, small towns, and peri-urban areas are deeply connected to nearby cities. People travel to towns for work, education, healthcare, shopping, and cultural activities. Cities depend on rural territories for food systems, landscapes, recreation, and ecological stability. Despite this interdependence, mobility systems and planning frameworks often treat rural and urban areas as separate, creating gaps in access, equity, and sustainability.

Rurbanism offers an approach that strengthens connections between rural and urban areas by designing mobility, public space, and local services that reflect the lived reality of rural communities. It recognises the specific identity, rhythms, and social infrastructures that shape life in villages and small towns. Rather than applying urban models to rural places, rurbanism begins with how residents actually move and interact.

This toolkit provides a practical, detailed, and context-focused guide to help local and regional authorities improve mobility and public space across rural and urban territories. It is based on real examples from ten European regions who developed Integrated Action Plans through the Beyond the Urban network. These regions include Bram in France, Tartu in Estonia, Treviso in Italy, Osona in Spain, Szabolcs 05 in Hungary, Hradec Kralove in Czechia, Santa Maria da Feira in Portugal, Machico in Madeira, Bucharest Ilfov in Romania, and Kocani in North Macedonia.

The purpose of this toolkit is to support municipalities, counties, and regions in creating more accessible, healthy, sustainable, and connected communities.



## PART 1

WHY RURBAN INTEGRATION MATTERS

#### 01. CHANGING REALITIES OF RURAL AND URBAN TERRITORIES

Rural and urban areas across Europe are becoming more interconnected. Rural residents often rely on cities for secondary schools, hospitals, workplaces, and cultural services. Families in cities use rural landscapes for leisure and tourism. Many people now live in one place, work in another, and socialise in a third.

Yet planning systems, mobility networks, and policy frameworks are often limited to administrative boundaries. **Transport plans are usually urban centred, while rural development plans rarely address mobility in depth.** This separation creates a mismatch between how people live and how systems are designed.





## 02.THE COSTS OF CAR DEPENDENCE

In many rural and peri urban areas, the private car is the only practical mode of transport. This creates several challenges:

Car dependency increases household costs, especially for low income families.

Children and teenagers
have limited
independence when
walking and cycling
feel unsafe

Older residents become isolated if they can no longer drive

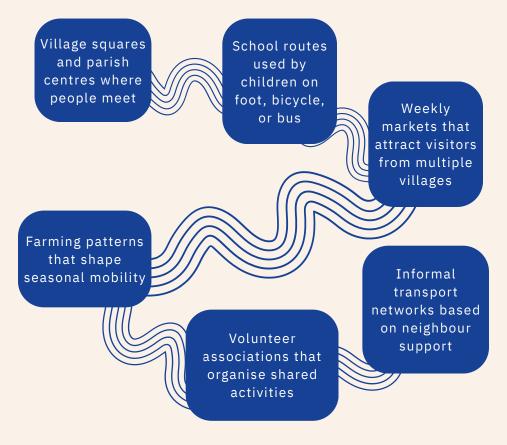
Transport emissions rise because trips are longer and more frequent.

Small town centres
experience congestion
at peak times.
Air quality and road
safety suffer

The absence of alternatives reinforces the cycle of decline, where walking and cycling become less viable over time.

# 03.UNDERSTANDING RURAL IDENTITY AND DAILY RHYTHMS

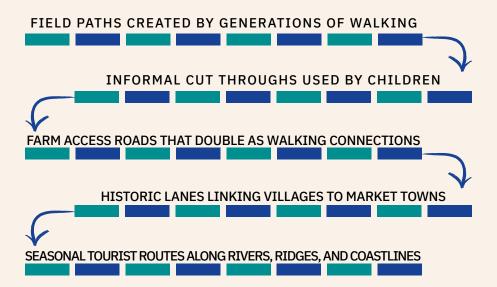
Rurbanism begins with the idea that rural communities have unique social structures, identities, and rhythms. These include:



These elements create a living infrastructure that already supports mobility. Any sustainable rurban strategy should be grounded in these local patterns rather than replacing them with generic transport systems.

## 04.MOVEMENT PATTERNS AND DESIRE LINES

People in rural territories often move along routes not shown in official plans. These include:



Mapping these movement patterns is the first step in understanding how people travel and what barriers they face.

## 05.BEYOND THE URBAN AREAS AS LEARNING LABS

**Treviso** in Italy is a historic city surrounded by a dense ring of villages and agricultural lands.





**Tartu** in Estonia serves a wide area of villages and small towns with long school commutes.

**Szabolcs 05** in Hungary consists of small villages with limited transport options.





**Santa Maria da Feira** in Portugal manages mobility across twenty one parishes.

Osona in Spain must coordinate mobility across more than fivety municipalities.



The ten partner regions illustrate the diversity of rural and small towns in Europe.



**Machico** in Madeira faces steep topography and scattered settlements.

**Kocani** in North Macedonia relies heavily on children walking from hillside settlements.





**Hradec Králové** in Czechia connects multiple villages through a regional transport hub.

**Bucharest-Ilfov** in Romania spans metropolitan and rural contexts with regional mobility needs





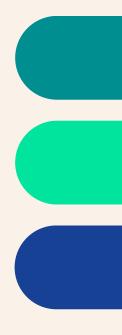
**Bram** in France uses strong community networks to encourage active travel.

## PART 2

## CHALLENGES AND INTERVENTIONS FOR STRENGTHENING RURAL-URBAN CONNECTIONS

In this section we focus on the common challenges that were shared across the partner cities, and the practical interventions that help strengthen rural—urban connections through mobility, public space, and services. The toolkit presents learnings as examples that illustrate how different cities can address similar challenges in context-specific ways.

They are not models to be copied, but reference points that show how interventions can be adapted to local geography, governance, and community dynamics.





## COMMUNITIES SHAPING THEIR FUTURE MOBILITY

FUNCTIONAL AREAS CONNECTED THROUGH INTEGRATED PUBLIC TRANSPORT

**RURAL-URBAN AREAS WHERE ACTIVE MOBILITY IS NORMAL** 

## COMMUNITIES SHAPING THEIR FUTURE MOBILITY

Successful rural-urban mobility requires participation from residents, schools, businesses, and civil society. Communities must be involved in designing routes, testing pilots, and evaluating impacts.



#### A. THE CONCEPT

Imagining new habits can begin with playful challenges, especially for children.

Through gamification, mobility becomes a learning experience that encourages behavioural change without limiting choice, but motivating citizens.

#### B. LEARNINGS FRON TARTU

Tartu introduced mobility games that reward walking, cycling, and using public transport, encouraging families to build new daily habits through play. The activities are designed so children earn points for active trips, turning routine journeys into small challenges that make sustainable travel more appealing. By framing behaviour change as a game rather than a rule, Tartu helps children and parents try out healthier travel patterns in a fun and low-pressure way.

THE

GAMIFICATION MAKES CHOISES ATTRACTIVE

Playful route markings, such as hopscotch or educational footprint trails with poems or multiplication tables, transformed school journeys into informal learning experiences that support active travel.

## PLACE MAKING

#### A. THE CONCEPT

Rurban territories can build places where essential services are closer and walking and cycling feel safe. This includes improving routes to schools, markets, clinics, and parish centres.



#### B. LEARNINGS FROM MACHICO

Machico used a proximity-focused approach to make short trips viable in an area shaped by steep slopes and dispersed parish centres. By mapping how people actually walk and identifying where gradients, missing crossings, and unclear and uninviting bus stops hinder movement, the municipality introduced small improvements that made everyday destinations easier to reach on foot. Targeted upgrades to pedestrian links, better wayfinding, and safer junctions helped convert physically short distances into trips that felt practical and comfortable.

THE

CO-CREATION BUILDS BELONGING By applying placemaking principles, the interventions went beyond functional improvements, reinforcing a sense of belonging.

## TACTICA INTERVE

#### A. THE CONCEPT

Tactical urbanism interventions help communities experience change before it becomes permanent.

These include pop-up pedestrian areas, temporary bike lanes, and test crossings.



#### **B**, LEARNINGS FROM TREVISO

Treviso tested a temporary pedestrianisation of Piazza Duomo to see how people would use the space when cars were removed. The event introduced temporary layouts, children's cycling activities, and on-site surveys to observe behaviour and gather feedback. By creating a low-cost, reversible trial in a central square, the city was able to assess safety, comfort, and public acceptance before considering permanent changes.

THE

START WITH TESTING SOLUTIONS

The pilot gave residents a chance to experience the space differently and provided planners with practical insights for future redesigns.

## FUNCTIONAL AREAS CONNECTED THROUGH INTEGRATED PUBLIC TRANSPORT

Rural - urban functional areas can improve mobility by coordinating buses, trains, and shared modes, so that people can move easily between villages and towns.

## DIGITAL MOBILITY INFORMAT

#### A. THE CONCEPT

In rural areas, unreliable or unclear information is often a greater barrier than infrastructure.

Digital tools can help residents plan trips confidently.



#### 📑, LEARNINGS FROM SANTA MARIA DA FEIRA

Santa Maria da Feira improved travel across its twenty-one parishes by standardising and clarifying public transport information through the Mob.Feira app. Many rural residents previously struggled with unclear timetables and inconsistent stop information, so the municipality introduced digital tools that provide clear routes, updated schedules, and QR codes at stops that link directly to the app.

THE

DIGITAL TOOLS CAN HELP RURAL AREAS By improving information rather than relying on major infrastructure upgrades, Mob.Feira makes planning trips easier, increases confidence in local services, and reduces the uncertainty that often discourages public transport use in dispersed rural areas. PEAK MOBILTY MANAGE

#### A. THE CONCEPT

Rural areas and medium-sized cities often face mobility management challenges during fairs, markets and festivals, despite these events being key drivers of the local economy.



#### B. LEARNINGS FROM HRADEC KRÁLOVÉ

Hradec Králové showed the value of a well-designed intermodal hub during the Rock for People festival, when tens of thousands of visitors needed safe and fast access to the city. The terminal's clear layout, coordinated bus and rail services, and strong links to walking and cycling routes allowed crowds to move efficiently without overwhelming the road network. By concentrating transfers in one organised node, the city demonstrated how even a modest hub can handle large peaks in demand while supporting sustainable travel options.

THE

ANTICIPATE AND COORDINATE

Early anticipation, combined with dedicated coordination and the use of digital and smart-city tools, enabled Hradec Králové to manage a temporary population comparable to its resident population.

17

## RURAL MOBILIT

#### A. THE CONCEPT

A careful understanding of rural mobility dynamics enables the creation of small, efficient multimodal hubs that support smooth transfers between buses, trains, cycling and walking.



#### **B.** LEARNINGS FROM TARTU

Tartu focused on small rural mobility hubs located around schools and local centres, where walking, cycling, and bus services naturally intersect. Analysis of school travel patterns and local bus use helped identify these everyday nodes as priority locations. Improvements to pedestrian access, cycling links, and clearer information at stops strengthened first and last kilometre connections, making rural bus services more usable for families and young people without requiring major infrastructure investment.

THE

These coordinated upgrades make public transport easier to navigate, more reliable, and better connected across both urban and rural areas.

WORK WITH PERSONAS AND THEIR DYNAMICS

## INTEGRATED TICKETING

#### A. THE CONCEPT

Large regions with both rural and urban zones benefit from integrated ticketing systems and clean fleets.



#### **B.** LEARNINGS FROM BUCHAREST-ILFOV

Bucharest–Ilfov is simplifying regional travel by introducing a unified ticketing system planned for full integration by 2028 and upgrading its fleet with 22 trolleybuses and 7 electric minibuses delivered by 2026. The region aims for 50% of regional routes to run on hybrid or electric vehicles by 2027, supported by new charging infrastructure. Alongside this, at least 10 stations will receive QR-based real-time information by 2026, and 10% of public transport stops will be modernised by 2027.

THE

INTEGRATE FARES
WITH RURAL FOCUS

These coordinated upgrades make public transport cleaner, easier to navigate, and more reliable for residents across both urban and rural areas.

INTEGRA MULTIMO

#### A. THE CONCEPT

Rural—urban connections often suffer from poorly coor-dinated transport services. Buses, trains, cycling, and walking are planned separa-tely, creating friction at transfer points and discouraging use.



#### B. LEARNINGS FROM HRADEC KRÁLOVÉ

Hradec Králové developed a multimodal terminal that connects bus and rail services with cycling and walking infrastructure, supporting smoother transfers for both daily commuters and event-related travel.

This intervention focuses on improving connectivity by integrating modes and strengthening interchange points so that journeys across settlements feel coherent and reliable.

THE

ACHIEVE TERRITORIAL AGREEMENTS

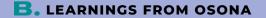
## RURAL-URBAN AREAS WHERE ACTIVE MOBILITY IS NORMAL

Active mobility plays a small role in many rural territories because roads are unsafe and cycling lacks infrastructure. Creating safe, continuous routes can make walking and cycling realistic choices.

## REGIONAL CYCLING CORRIDG

#### A. THE CONCEPT

Cycling infrastructure often stops at municipal boundaries. Creating regional corridors enables longer, safer trips between settlements.



Osona produced in 2021 a Cicling Master Plan across 28 municipalities that was lowly implemented. They took lead in rethinking it's governance sitting toghether the municipalities, civil society and the univerity to identify new priorities, where cycling routes broke at borders and where safer links were needed between villages, towns, and rail stations. Through a shared mapping session and joint analysis they agreed on priority corridors and aligned design standards so routes would connect cleanly across jurisdictions.

THE

USE COLLECTIVE MAPPING AS A TOOL

This collaborative approach allowed Osona to plan a continuous regional network rather than isolated local paths, making longer trips by bicycle safer and more practical for residents.

# SAFE ROUTO SCHOOL

#### A. THE CONCEPT

In many rural areas, school trips create congestion and safety concerns. Providing safe, continuous paths encourages walking and cycling.

Key actions include improving crossings, reducing speeds, adding lighting, and creating walking buses or bicycle convoys.



#### **B.** LEARNINGS FROM KOČANI

Kočani improved school travel by mapping the routes children actually use and identifying where traffic speed, poor lighting, and missing crossings created risks. The municipality then focused on simple fixes along these priority paths, such as clearer markings, better visibility at junctions, and small surface upgrades. By targeting the sections pupils rely on most, Kocani created safer, more continuous routes that support walking and reduce pressure from car drop-offs.

THE

HELP CHILDREN LEAD BEHAVIOURAL CHANGE Kids and students were involved along the process, specially during European Mobility Activities that took place 2023, 2024 and 2025.

## PROXIMI BASED IMPROVE

#### A. THE CONCEPT

Small, easily implementable changes near schools, shops or bus stops deliver early wins that improve comfort and safety while sustaining long-term engagement.



#### **B.** LEARNING FRON SZABOLCS 05

Szabolcs 05 focused on improving short everyday trips by addressing small but critical gaps around schools, shops, and local services. Through engagement with residents and schools, missing crossings, poor lighting, and uneven pavements were identified as key barriers to walking. The municipality responded with targeted, low-cost upgrades that improved visibility, safety, and comfort along these routes.

THE

MANTAIN ENGAGEMENT WITH EARLY WINS

These coordinated adjustments made nearby destinations easier to reach on foot and helped reduce reliance on short car trips in small towns and villages.

## COMMUNITY BASED INITIATIVES

#### A. THE CONCEPT

Through meaningful participatory governance, local associations and civil society can take a clear leadership role in driving change by organising cycling buses, group walks and heritage-themed journeys.

#### B. FOLLOW BRAM

Bram's Vélobus brings parents and volunteers together to escort children to school by bike along fixed routes, creating a safe and social alternative to car drop-offs. The regular group rides help children gain confidence, reduce congestion around schools, and show families that cycling can be a practical everyday mode. By relying on local volunteers rather than major infrastructure, the Vélobus has become a simple, community-driven way to support active travel.

something more?



MAKE VISIBLE BOTTOM-UP ACTIONS

## PART 3

HOW TO IMPLEMENT RURAL-URBAN TRANSFORMATION



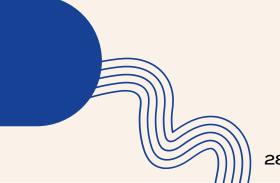


#### TRANSFORMATION **PROCESS**

After exploring what we learned, this section focuses on how change actually happens. Turning good ideas into lasting change requires more than a plan - it requires a process.

For rural-urban functional areas, we provides guidance on how to implement transformation.

The steps that follow offer a practical pathway to turn shared ambition into concrete decisions. tested solutions, and lasting outcomes: from understanding the local context to upscaling policies.



## 01. UNDERSTANDING THE LOCAL CONTEXT

Effective implementation starts with a clear understanding of how mobility works in everyday life across rural—urban connections. This means focusing on short trips, school journeys, access to services, and links between villages and towns, rather than only on strategic networks or planned infrastructure.



Cities and regions should begin by using existing data already available through municipalities, transport operators, schools, or regional authorities. Traffic counts, public transport usage, road safety records, and school travel patterns often provide a strong first picture of current conditions.

Where needed, this can be complemented with simple observations such as walkabouts, route mapping, travel time checks, and conversations with residents, children, and seniors.

Documenting these findings creates a clear baseline that captures current conditions before any action takes place. This baseline supports prioritisation, before-and-after comparison, and communication with decision-makers and communities, and provides a foundation for selecting interventions and measuring impact.

# 02.STAKEHOLDER ENGAGEMENT AND COMMUNITY BUILDING

Engaging residents in rural and peri-urban areas works best when it builds on existing social networks rather than formal consultation alone. Parish halls, schools, festivals, markets, and volunteer groups are often more effective entry points than public meetings. Engagement should reflect how communities already live, meet, and organise.



In Osona, municipalities, cycling groups, and local stakeholders were engaged early to build consensus around regional cycling corridors, helping align priorities across adminis-trative boundaries.

## 03.CO-CREATION AND PARTICIPATORY DESIGN

Co-creation means working directly with residents to design solutions from the outset. Methods include participatory mapping, walkabouts, workshops with children and seniors, and simple physical or visual modelling. These approaches help ensure that interventions respond to real needs and daily routines.

In Tartu, school-based activities were used to explore everyday travel choices, allowing children and families to contribute directly to the design of mobility initiatives.



## 04.EXPERIMENTATION AND PILOT PROJECTS

Pilots allow communities to test ideas with low commitment and visible results. Temporary pedestrian areas, painted crossings, pop-up cycle lanes, test bus routes, and small-scale public space improvements help people experience change before it becomes permanent.

Treviso used a temporary pedestrianisation of a central square to observe behaviour, safety, and public response, creating shared evidence to inform longer-term decisions.



#### 05.DEFINING ACTIONS, ROADMAPS, AND MEASUREMENT

Pilots should be translated into clear actions with defined responsibilities, timelines, and indicators. A simple roadmap helps connect short-term tests with mediumand long-term change, while measurement ensures learning and accountability.



In Szabolcs 05, youth-led mobility pilots informed a phased action roadmap, using simple indicators such as route use and perceived safety to compare conditions before and after implementation.

## 06.IMPACT MEASUREMENT

Evaluation should combine quantitative data such as footfall, mode share, and travel time with qualitative insights from interviews, focus groups, and resident stories. This mixed approach helps explain not only what changed, but why.

Santa Maria da Feira combined usage data from the Mob.Feira app with user feedback to understand how clearer infor-mation affected confidence and public transport use.



## 07.POLICY INTEGRATION AND SCALING

Successful pilots must be incorporated into official strategies such as Sustainable Urban Mobility Plans, local action plans, and regional mobility frameworks. Long-term investment plans, cross-municipal agreements, and funding proposals should build directly on pilot results.

Bucharest—Ilfov aligned tested measures with metropolitan transport planning and investment priorities.

DISCOVER OUR TOOLS



Take a free ride on our tools and templates

## CONCLUSION

#### TOWARDS A CONNECTED RURAL AND URBAN FUTURE

Rural-urban connections succeed when planning begins with an understanding of how people truly live. Communities across Europe demonstrate that small interventions can have significant impacts when grounded in local identity, daily rhythms, and social infrastructure.

By combining co creation, pilot projects, evidence based evaluation, and policy integration, rurban territories can create healthier, safer, and more inclusive mobility systems. The Beyond the Urban regions show that even small municipalities can innovate when residents are empowered to participate and experiment.

This toolkit provides a pathway for municipalities, regions, and communities to build a more connected, sustainable, and equitable future.

Find all partners IAP's, read their articles and learn more about the network in... www.urbact.eu/networks/beyond-urban



## RESOURCE LIBRARY

This annex provides a curated list of guidance documents, technical manuals, policy references, and practical tools that support rural and urban mobility planning. It is organised into thematic sections for ease of use and includes direct links to external resources as well as references to the Beyond the Urban Integrated Action Plans.

A. URBACT RESOURCES

#### A1. URBACT Toolbox

A comprehensive collection of methods and tools for participatory and integrated action planning.

https://urbact.eu/toolbox-home

#### **A2. URBACT Toolbox Overview (Portico)**

Summary of the URBACT method and its practical components, including integration, participation, and implementation.

https://portico.urban-initiative.eu/key-tools/urbact/urbact-toolbox

#### A3. Planning Actions (URBACT Toolbox)

Tools for designing actions, planning steps, and co creating solutions.

https://urbact.eu/toolbox-home/planning-actions

#### **A4. URBACT Programme Portal**

Official information on URBACT networks, practices, and events.

https://urbact.eu/

#### B. SUSTAINABLE URBAN MOBILITY PLANNING GUIDANCE

#### B1. EU Urban Mobility Observatory: SUMP Guidelines (2nd Ed.)

Official guidelines for developing and implementing Sustainable Urban Mobility Plans, including a decision makers summary.

https://urban-mobility-observatory.transport.ec.europa.eu/sustainable-urban-mobility-plans/sump-guidelines-and-decision-makers-summary\_en\_

#### **B2. SUMP Guidelines Online Booklet (ELTIS)**

Digital version of the new guidance for easier reading and navigation. <a href="https://civitas.eu/news/new-eu-sump-guidelines-now-available-as-an-online-booklet">https://civitas.eu/news/new-eu-sump-guidelines-now-available-as-an-online-booklet</a>

#### **B3. SUMPs-Up Topic Guides**

Thematic guides addressing specific themes such as cycling, public transport, behaviour change, and evaluation.

https://sumps-up.eu/publications-and-reports/

#### C. CHILD FRIENDLY MOBILITY AND PUBLIC SPACE

#### C1. Shaping Urbanization for Children: UNICEF Handbook

Global guide to child responsive planning, including mobility, school access, and public space design.

https://www.unicef.org/reports/shaping-urbanization-children

#### **C2. Child Friendly Cities and Communities Handbook**

Practical handbook summarising mobility and accessibility actions from UNICEF's Child Friendly Cities work.

https://www.childfriendlycities.org/reports/child-friendly-cities-and-communities-handbook

#### C3. Planning and Designing Child Friendly Living Spaces

Detailed design guidance with checklists and examples for professionals in planning and construction, UNICEF Switzerland. PDF link:

https://www.unicef.ch/sites/default/files/2021-10/Handbuch EN.pdf

#### D. RURAL DEVELOPMENT AND TERRITORIAL COHESION

#### D1. Long Term Vision for EU Rural Areas

European Commission framework for supporting resilient, connected, and vibrant rural territories.

https://rural-vision.europa.eu/index\_en

## D2. The Long Term Vision for the EU's Rural Areas: Key Achievements and Ways Forward

Communication report summarising progress and future directions for rural policy. PDF link:

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024DC0450

#### E. TACTICAL URBANISM AND TEMPORARY INTERVENTIONS

#### E1. TUMI Tactical Urbanism Guidebook

Step by step guidance for planning and delivering low cost, temporary mobility and public space interventions. PDF link:

https://www.transformative-mobility.org/wp-

<u>content/uploads/2023/03/TrainingMaterial A Tactical Urbanism Guideb</u> <u>ook-5zZpKb.pdf</u>

#### **E2. Tactical Urbanists Guide to Materials and Design**

Materials, layout ideas, and delivery approaches for interim design and community led pilots.

https://tacticalurbanismguide.com/guides/tactical-urbanists-guide-to-materials-and-design/

#### E3. Tactical Urbanism Toolkit (TransLink and Imagine Cities)

Adaptable toolkit for designing safe and playful temporary mobility interventions. PDF link:

https://www.imaginecities.com/media/steps contents/TransLink Tactical \_Urbanism Toolkit.pdf

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