TACTICAL URBANISM TOOLKIT

A guide to demonstration and interim projects focused on active transportation and placemaking

JUNE 2020

The TransLink TravelSmart team and Urban Systems would like to acknowledge the contributions of many individuals and groups who provided input and support for the development of this document. This includes, representatives from the region's municipalities, the provincial Ministry of Transportation and Infrastructure, the regional health authorities, and other community and non-profit organizations working in transportation. Thank you all.

All photos taken by Urban Systems, unless otherwise noted.

CONTENTS

EXECUTIVE SUMMARY

TravelSmart's Tactical Urbanism Toolkit provides a proactive approach for active transportation and placemaking projects through thoughtful communication plans and strategic community engagement tactics. This toolkit was initiated by TransLink to support safer street space for youth but can be used for all ages and abilities. This toolkit was developed in collaboration with the province of BC, Metro Vancouver municipalities, and other agencies across the region. The intent of the toolkit is to introduce the tools and resources necessary to work with municipal departments and undertake these projects. Though the toolkit is aimed primarily at municipal staff, it could also be used by any other group who is interested in collaborating with a municipality on a tactical urbanism project, including school communities, health agencies, and other community stakeholders.

Tactical urbanism is a valuable tool that enables light, quick, and cheap implementation of projects that address safety issues, equity concerns, and infrastructure gaps while engaging with the community. It consists of a series of rapid, low cost project implementation techniques that aim to test and showcase new ideas, enhance the public realm, and create lasting positive outcomes.

Tactical urbanism projects can include pop-up bicycle lanes, temporary parklets, street closures, and a number of other fun and creative project types. These projects can be on the ground for anywhere from a few hours to days or even weeks, and they can sometimes be transitioned into permanent projects. Cities across the globe – as well as right here in Metro Vancouver – have been using tactical urbanism projects to re-imagine the look, function, and role of public spaces by quickly applying best practice street design principles to real world situations. This toolkit provides an overview of the tactical urbanism process, including an emphasis on the importance of communication and engagement plans prior to project planning, design, implementation, evaluation, and stewardship. It underlines the importance using context sensitive design and applying an equity lens to create inclusive projects that are welcoming to all community members. The toolkit also provides a detailed overview of the materials required for tactical urbanism projects and lists a number of example project types to help provide inspiration.

The toolkit provides a road map for undertaking a tactical urbanism projects and is meant to spark thinking, communication, and collaboration. Note that tactical urbanism projects are context dependent, and municipalities must practice sound planning and engineering judgment. The toolkit is also meant to be a 'living document' that will be updated with new resources and advice based on feedback from users. Give the toolkit a read, and then reach out to your municipality, engage with your community, and create some exciting and meaningful projects!

1.0 INTRODUCTION

This section introduces tactical urbanism, outlines why it should be used, and explains its value as a means of demonstrating positive change and engaging the community. This section also outlines the purpose and structure of this toolkit and lays out a number of guiding principles that apply to all tactical urbanism projects.

WHAT IS TACTICAL URBANISM?

Tactical urbanism is a method of rapid, low cost project implementation using a set of techniques designed to enhance the built environment, with the intent of bringing about long-term positive outcomes for the community. It provides the opportunity to re-imagine the look, function, and role of public spaces by quickly applying best practice street design principles to real world situations. Cities across the globe have been using tactical urbanism techniques to trial demonstration (lasting hours to days) and interim (lasting over a week) projects to determine the benefits and challenges of making permanent changes to the built environment.

Tactical urbanism projects typically arise from an identified community need or issue and present an excellent opportunity to engage with the community members. These projects can be initiated and led by many different organizations, agencies, or groups, including municipalities, health authorities, and school communities. Ultimately, project teams must work closely with – and have the full support of – all relevant municipal departments to ensure that the planning, design, and implementation of a tactile urbanism project is done legally, safely, and effectively.

Ultimately, project teams must work closely with – and have the full support of – all relevant municipal departments to ensure that the planning, design, and implementation of a tactile urbanism project is done legally, safely, and effectively. Any temporary modifications to the road network or to road capacity must be reviewed by the municipality's engineering department. Furthermore, any temporary changes on (and/or providing access to) the Major Road Network or the Regional Truck Route Network require municipalities to seek approval from TransLink. More information about the Major Road Network and associated map can be found on TransLink's website. If tactical urbanism projects will have any potential impacts on transit operations, TransLink and Coast Mountain Bus Company (the contract operator for bus transit services in Metro Vancouver) should be contacted early in the process so that any issues can be identified and mitigated.

COVID-19 CONSIDERATIONS

The global COVID-19 pandemic has drastically reshaped the way people use and travel through public spaces. Public health officials around the world have recommended several practices to minimize the chance of spreading the virus, including "physical distancing," which involves avoiding crowds and maintaining at least two metres of space from one another. In addition to physical distancing recommendations, cities around the world have been temporarily reallocating parking and travel lanes to create more spaces for people to safety travel and be outside.

In response to COVID-19, the Federation of Canadian Municipalities (FCM) has released a COVID-19 Street Rebalancing Guide to provide cities with national-level guidance for street design, including both temporary and interim measures. The FCM guide can be used in tandem with this toolkit to implement meaningful short-term projects, while also considering how these temporary projects can transition to interim or permanent projects in the future.

For additional COVID-19 recommendations and information, please refer to the BC Centre for Disease Control and WorkSafe BC.

WHY TACTICAL URBANISM?

The overarching goal of tactical urbanism is to test designs, ideas, and changes to the built environment that aim to improve community connection, safety, health, equity, accessibility, and happiness. Tactical urbanism projects can be used as a tool to:

- **Implement projects lighter, quicker, cheaper:** This term refers to repurposing spaces in an imaginative and cost-effective manner. Tactical urbanism projects use temporary, inexpensive materials and rapid planning and design to demonstrate a space's potential. These projects should not be overcomplicated – use your imagination to propose positive change in your community!

- **Address safety concerns and infrastructure gaps:** What are the real and perceived transportation or personal safety concerns in a project area? Is there a network or facility gap or need that can be filled? What changes could be made to address these concerns? Tactical urbanism projects allow communities to implement quick, lower cost responses to identified issues. Data and feedback can then be collected on the impact of the response.

- **Engage with community members:** Tactical urbanism can also be used as a tool for public engagement. The location and visibility of many tactical urbanism projects provides project personnel with the opportunity engage directly with the community and collect feedback in a manner not typically seen in other community engagement events and with residents who may not otherwise have participated. Tactical urbanism can also be used as a tool for public engagement. The location and visibility of many tactical urbanism projects provides project personnel with the opportunity engage directly with the community and collect feedback in a manner not typically seen in other community engagement events and with residents who may not otherwise have participated. Promoting active, safe, and sustainable transportation at schools is an excellent example. Tactical urbanism initiatives offer a unique opportunity to engage with youth, the school community, and the broader neighbourhood on what might improve safety and comfort for students and families, and it can form a powerful sense of ownership and legacy can be formed when these parties work together to re-imagine the community spaces they share. Additional information specifically about the benefits of active transportation for children and youth can be found in Appendix C.

- **Build public and political support:** By demonstrating a possible solution to an issue in real life – rather than on paper, project teams can build community, stakeholder, and political support for a project. These projects can help shift the conversation from the hypothetical to the implementable and counter preconceived notions about impacts of proposed changes to the built environment.

- **Reallocate road space:** Tactical urbanism projects have been used to reallocate road space in response to recognizing that the current design of a street may not be adequately serving the needs of all road users. For example, road space reallocation during the COVID-19 outbreak have opened space for people to meet physical distancing recommendations. In addition, a greater number of people using active modes of transportation for commuting to school or work, and for other daily trips, leads to an increase in physical activity levels and a corresponding decrease in the rates of chronic disease.

- **Enhance placemaking:** Tactical urbanism projects can provide an opportunity to take spaces and make them into places by creating inviting environments that encourage people to interact and linger. Including local businesses and residents in the process of imagining, designing, and implementing a project can improve community connection and amenities. These projects can work in partnership with community members to incorporate and celebrate local art and culture. Tactical urbanism projects also have the potential to support economic revitalization by bringing more people in front of local businesses.

- **Improve equity and access to public spaces:** In many communities, there remains a significant lack of park and public space to gather. Repurposing public spaces can address this barrier by creating community amenities, increasing vibrancy, and providing free public spaces that all community members to access, all without a significant investment in planning and capital costs. Tactical urbanism projects should be accessible and welcoming to all and should help build community resilience. They can also be used to provide culturally sensitive education on the history of public spaces and of the community, and they can support the ongoing effort towards reconciliation with Indigenous people.

HEALTH AND WELL-BEING BENEFITS

A number of the tactical urbanism benefits above ultimately relate back to improving both physical and mental heath and well-being. Through their focus on addressing safety, reallocating road space for active modes, and providing engaging outdoor public spaces that encourage social interaction, tactical urbanism projects have the potential to improve community health.

The **My Health My Community** project, a partnership between Vancouver Coastal Health, Fraser Health, and the University of British Columbia that conducted the largest population health survey in BC, shows the benefits of promoting active, outdoor, social activities. Survey results found that using active modes of transportation for commuting decreases the odds of being overweight or obese by 33%. Additionally, providing more access to inviting environments gives people the opportunity to interact and feel more socially connected, resulting in health benefits such as better mental health and an overall sense of well-being. For example, a report on Social Connection and Health found that high social connection has the benefits of lower rates of anxiety and depression, as well as higher self-esteem and empathy.

Further information relating to the health benefits of active transportation – specifically in terms of active school travel – is provided in the Appendix.

BE UNDERSTANDING OF OPPOSITION

As creatures of habit, we often have an innate resistance to sudden and unexpected changes to our environment or routine. Remember that day when your usual routine was suddenly disrupted? So do many others. It is important to recognize that not all of those with whom you interact with will be as excited or even interested in your project as you and your team are.

Do your best to listen to concerns in a non-judgmental manner, and be sure to communicate that this is a temporary project and that part of the process is to gather comments and feedback from residents and users. Lastly, be sure to visibly record this feedback in front of the person with whom you are engaged with and ensure that all your staff and volunteers receive direction to interact with the community in the same manner. While change can be hard, feeling heard can help to reduce some of these concerns.

TOOLKIT ORIGIN AND PURPOSE

As part of the ongoing development of the TransLink's Youth Travel Strategy, which is examining ways to encourage safe and active travel to schools across the region, tactical urbanism was proposed as a strategy to re-imagine how streets can be improved not only students, but for all community members. In response to increasing interest in tactical urbanism projects across Metro Vancouver, TransLink collaborated with the province, municipalities, and agencies across the region to identify what tools and resources they needed to undertake these projects.

This **Tactical Urbanism Toolkit** arose from these discussions and is intended to provide ideas and tools to successfully plan, design, and implement tactical urbanism projects that can be used as a tool for community and stakeholder engagement. It has a dual purpose of supporting active school travel as well as more general application to improvements elsewhere. The toolkit includes an introduction and guiding principles and an outline of the tactical urbanism project process. The toolkit appendix also includes a list of commonly used materials, and project examples.

While this document was primarily created for use by municipal staff, the document has also been designed to provide non-municipal entities such as school communities, health agencies, and other interested parties with the tools, guidance, and resources required to initiate and undertake these projects in collaboration with municipal partners. Municipal staff should provide sound planning and engineering judgment when planning, designing, and implementing tactical urbanism projects to ensure safety and accessibility for all users.

LIVING DOCUMENT

This is the first version of the Tactical Urbanism Toolkit. This resource is intended to be a 'living document' that will be updated with new resources, visuals, and materials as needed and based on input from users of the document. This toolkit has been developed in an expeditious manner to help provide guidance with rapid response road allocation projects that are part of the physical distancing recommendations in place during the COVID-19 outbreak in the spring of 2020.

GUIDING PRINCIPLES AND CONSIDERATIONS

The following guiding principles and considerations should be acknowledged when planning a tactical urbanism project.

- **Safe:** Ensuring the safety of all staff, volunteers, and users should be the first (and ongoing) consideration of any project. The planning, design, and implementation of any project should mitigate any existing or potential hazards as much as possible. The final project should only be undertaken once all safety concerns have been considered and addressed.

- **Accessible:** Like safety, accessibility should be considered throughout the entire project process. As tactical urbanism projects can alter how a street functions, it is critical that they remain accessible for people of all ages and abilities. Tactical urbanism treatments and projects should be carefully assessed to understand how they may impact all road users and how these impacts can be mitigated. As an example, painted street features such as decorative crosswalks can impact visual recognition significantly and should be carefully considered before implementation.

- **Balance the impact:** A tactical urbanism project must consider and mitigate the impact it may have on all road users, as well as nearby residents and businesses. This includes essential vehicles such as emergency services, waste management, transit, and goods movement. Additionally, people still need to be able to access homes, businesses, and other services.

- **Equitable and inclusive:** Consider the neighbourhoods and community members that tactical urbanism projects can best service. There are opportunities to focus on projects in locations that support populations and neighbourhoods with the greatest need, such as those suffering from underinvestment, poor infrastructure, and a lack of access to parks, recreation, and services. Inclusion means supporting and respecting the diverse needs, skills, and experiences of members of equity-seeking groups, which includes women, racialized peoples (including Black, Indigenous, and People of Colour (BIPOC)), persons with disabilities, and persons seeking equality on the basis of their sexual orientation and gender identity. Applying an equity lens to tactical urbanism projects involves reflecting on the needs of people with a diverse range of experiences, recognizing conscious and unconscious biases, identifying and eliminating barriers for participation, and creating new ways to include others. These steps are crucial to creating inclusive projects that welcome all community members, address historic and system inequities, and avoid further harm and discrimination.

- **Communication and promotion:** Communication is a critical component of planning, designing, implementing, and maintaining a tactical urbanism project. It is required through every stage and will vary depending on the project. Communication between municipal departments, external agencies, community groups, business owners, and other applicable stakeholders must be considered. It is important to acknowledge the challenges that have existed with tactical urbanism in regard to equitable and meaningful engagement. Without public feedback and collective community support, inequities and mistrust can be worsened. Consider equity in all communications and try to reach all different groups in the community.

- **Mitigate risks:** Tactical urbanism projects are still very new concepts for many. As with any new and unknown initiative, there can be an initial resistance due to the perception that rapid changes to the built environment can pose a significant risk to users and residents. It is important to address these concerns by having a detailed safety and liability plan in place that demonstrates due consideration of potential risks and focuses the conversation on the potential benefits of your project, not just the potential risks.

TACTICAL URBANISM IS NOT ALWAYS TYPICAL In the world of manuals, regulations, and guidelines, it can sometimes be difficult to implement a project that may not strictly adhere to all of these pre-existing guiding documents. For example, demonstration project signage may not fully meet MUTCDC guidelines, dimensions of curb bump outs may not adhere to usual design standards, and project materials may not be those that are typically employed on streetscaping projects. This is ok! Tactical urbanism is not intended to be business as usual, but rather is aimed at exploring what is possible. Approach these projects with an open mind and do your best to accept that tactical urbanism projects can often challenge pre-conceived notions of how to design and build a street.

2.0 TACTICAL URBANISM PROCESS

This section outlines the typical process for completing a tactical urbanism project, from planning and design to implementation, monitoring, and stewardship.

PROCESS OVERVIEW

The tactical urbanism process is context and project dependent and differs depending on who is leading the project. Understanding the inputs, activities, outputs, and outcomes, while recognizing assumptions and external factors, is critical for any project and is at the root of the process outlined in this document. The steps below are provided for consideration only – the process may not be linear, and not all step will be required in every context and for every project. Project leaders should carefully consider each step and if it may be required on a project by project basis.

It is important that sound planning and engineering judgment is considered when going through the tactical urbanism planning process outlined below by all involved.

ALL TACTICAL URBANISM PROJECTS REQUIRE MUNICIPAL APPROVAL

Projects led by municipalities:

- Each project will need to go through a series of internal approvals. It is important to gain support from different departments, such as transportation, engineering, planning, public works, parks and recreation, and emergency services. Projects should also be supported by upper levels of management and City Council.

- Attaining internal approvals is often an iterative process comprising a series of discussions that incrementally build support. Maintain consistent communication, be receptive to comments and concerns, and adapt the project to meet the unique needs of each department. Showcasing examples of successful project implemented elsewhere can help gain support for this type of work.
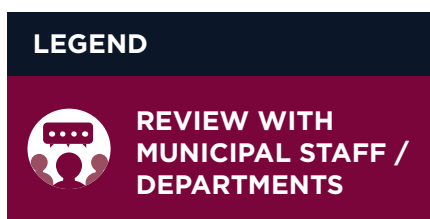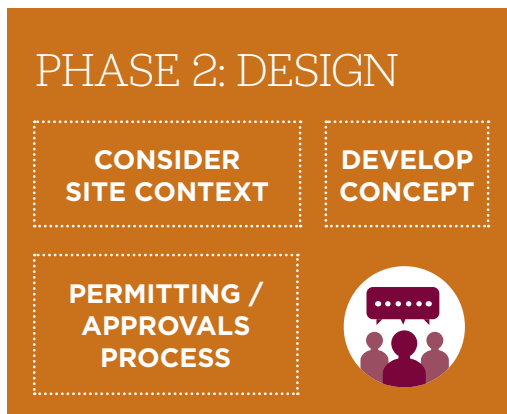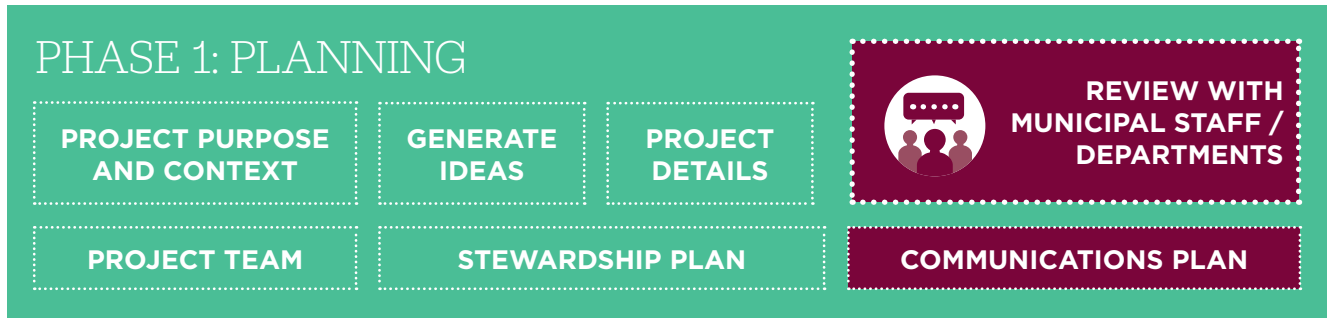
Projects led by non-municipal organizations:

- Municipalities own and operate the vast majority of roads and public spaces in Metro Vancouver. As such, municipal approval is required for all tactical urbanism projects within the public right-of-way or on other public land.

- Organizations should partner with the municipality to have municipal staff support the delivery of the project, or they should seek full support and approval through the permitting process to deliver the project themselves.

- Illegal or unsanctioned projects run the risk of jeopardizing safety, immediate removal by police or bylaw enforcement staff, and potential legal ramifications to participants.

- Having a well-defined proposal submitted early in the planning process, as well as early and frequent communication, collaboration, and cooperation with municipal staff, can help to significantly reduce these concerns.

The tactical urbanism process consists of the four phases listed below and outlined below.

1. Planning   2. Design   3. Implementation   4. Monitoring, Evaluation, and Stewardship

PHASE 1: PLANNING

PROJECT PURPOSE AND CONTEXT	GENERATE IDEAS	PROJECT DETAILS

REVIEW WITH MUNICIPAL STAFF / DEPARTMENTS

PROJECT TEAM	STEWARDSHIP PLAN

COMMUNICATIONS PLAN

PHASE 2: DESIGN

CONSIDER SITE CONTEXT	DEVELOP CONCEPT

PERMITTING / APPROVALS PROCESS

PHASE 3: IMPLEMENTATION

IMPLEMENTATION PLAN	PROMOTION & AWARENESS
COORDINATION & PREPARATION	IMPLEMENT THE PROJECT

PHASE 4: MONITORING, EVALUATION, AND STEWARDSHIP

MONITOR	EVALUATE & ADJUST	CLEAN UP	MAINTENANCE & STEWARDSHIP	MAKE PERMANENT
REPORT				

ALL PHASES: COMMUNICATIONS

LEGEND

REVIEW WITH MUNICIPAL STAFF / DEPARTMENTS

COMMUNICATIONS (ALL PHASES) Communication between the project team, municipal staff across various departments, and other internal and external stakeholders is key to a successful tactical urbanism project. Communication should be initiated early and maintained throughout all phases. This involves coordinating project planning, design, implementation, and stewardship as well as promoting the project to the public and reporting out results and lessons learned. Communications will also have an impact on project timelines – for example, lead time is required to get promotions onto websites and into newspapers. Plan for communications and ensure that enough time is provided at each stage of the tactical urbanism process.

Thoughtful communication and engagement are required for achieving community buy-in. This is crucial for getting community members to use and experience the tactical urbanism project, and also for gaining support when working to transition temporary projects into permanent projects. Communication is a two-way exercise – actively listen and respond to community members and apply an equity lens to seek out those who are typically underrepresented or who may be adversely affected by a project. Partner with community and advocacy groups to invite their communities into these spaces.

Further details on communication are provided throughout this section in coloured text boxes like this.

PHASE 1: PLANNING

In this stage, project planners must answer a series of basic but important questions: who, what, when, where, why, and how (including how much budget). Key logistics such as project location, timeline, stakeholders, team, and materials should all be outlined and approved by the municipality at this stage, with more detailed design to come in Phase 2.

It is crucial to communicate with municipal staff across various departments throughout the planning stage to ensure that the municipality – including upper levels of management – support the project. Additionally, projects should all be planned with an equity lens to ensure that all community members are considered, represented, and welcomed.

PHASE 1: PLANNING

PROJECT PURPOSE AND CONTEXT	GENERATE IDEAS	PROJECT DETAILS
PROJECT TEAM	STEWARDSHIP PLAN	

REVIEW WITH MUNICIPAL STAFF / DEPARTMENTS

COMMUNICATIONS PLAN

PROJECT PURPOSE AND CONTEXT

Purpose and Goals

Identify the purpose for considering a tactical urbanism project. This could include community building, beautification, or solving a specific problem, such as unsafe conditions for active transportation or a lack of public space. Before spending time generating solutions to the problem that has been identified, check in with the appropriate municipal staff and departments to determine whether the problem is in fact real or perceived.

> - **For example, speeding is often perceived by residents as a problem along certain corridors, but municipal traffic data may show that this is not actually the case. In this context, there may still be opportunities to improve the streetscape through tactical urbanism, but the correct problem or purpose for the tactical intervention must first be identified.**

It is important to define what a successful outcome will look like for your project. This will enable accurate and useful monitoring, evaluation, and adaptation.

Identify the Context

Identifying the context includes considering basic information about the proposed project site and its surrounding built environment, including but not limited to:

- Street classification (local, arterial, etc.), cross-section, and role within the network.

- Land use, including types of businesses present.

- Temporal elements (i.e. does the problem occur only at certain times of day, days of the week, or months of the year?)

- Human element (e.g. who are the stakeholders involved and what are their roles?)

GENERATE IDEAS

Brainstorm potential solutions to achieve the project purpose and goals. There may be multiple solutions and they should all be laid out for consideration. Collaborate with community members such as local schools, community centres, seniors, artists, and businesses to generate ideas that will meet the needs and desires of the community and generate project buy-in.

For example, slowing down motor vehicle traffic in a school zone through tactical urbanism can be accomplished in several ways: curb extensions, chicanes, or even full road closures that are programmed with street painting and games. Additional project examples are provided in Appendix B.

PROJECT DETAILS

Opportunities and Constraints

A much as possible, all opportunities and constraints should be considered to inform project design, costs, logistics, and overall feasibility. Identifying opportunities will help to make a case for the project, which is useful when applying for permits and funding.

Identifying constraints is crucial for thinking through hurdles before they happen and ensuring an efficient and cost-effective design and implementation process. This step will help clarify the project design, materials, timeline, costs, and other considerations.

Timeline

Considering specific dates for the project is important. Would the project work best in the spring, summer, fall, or winter? Are there any overlapping events or holidays that would add to or detract from the project? Consider the impact of weather and travel patterns.

Additionally, you need to determine the length of time that the project will be on the ground. The timeline for the project will typically be determined by the purpose of the project. In turn, the project timeline will then determine the materials used and the timeframe for planning, design, and implementation. Three approximate timelines have been identified and summarized below. Regardless of the timeline selected, ensure that sufficient time for communications and project promotion is included, including lead time to develop communications content, get approvals, and get the content onto websites and into newspapers.

- Demonstration
  - » Designed and implemented within days.
  - » Typically, on the ground 1 day to 1 week.
  - » Materials are temporary, such as traffic cones, plastic barricade, and signage.

- Interim
  - » Designed and implemented within months.
  - » Typically, on the ground 1 week to years; design components can be easily adjusted and modified.
  - » Materials are flexible, have moderate costs, and can be implemented quickly, but are more permanent than those used for demonstration projects – e.g. parking stops, flexible delineator posts, and planters.

- Permanent
  - » Some tactical urbanism projects may transition to permanent over time.
  - » Typically require more time to design and implement (months to years).
  - » Intended to be permanent with only minor design modifications.
  - » Materials are permanent with higher capital costs.

Costs and Funding

Order of magnitude project costs should be estimated early in the planning process so that funding sources can be identified. Detailed costs can be identified in the design stages once materials and logistics are finalized. Potential funding sources include:

- Regional funding (e.g. TransLink).

- Municipal funding.

- External funding (e.g. health authorities, school districts, business associations, etc.).

- Other funding sources (e.g. grants, sponsorship, school parent advisory committees).

Safety and Liability

Potential liability can be an early barrier for many types of projects, so it is important to address this issue early in the planning process. This process can often involve:

- Consultation with municipal legal departments.

- Creation and review of safety and traffic control plans.

- Review of existing insurance policies to determine if the current level of coverage is sufficient for your project.

In past tactical urbanism projects across Canada, projects have typically been covered under existing insurance coverage for road construction projects. It is important to confirm that this coverage is in place early in the planning process. This may require completing a traffic and safety management plan for review by municipal staff or their insurance providers. When submitting your plan, remember that you will be using tools and materials already in common usage on roadways – traffic barrier elements are regularly used on our roads, and many tactical urbanism projects use these same elements, It is also imperative that you identify potential hazards early on in your project planning, create a plan to mitigate risk and ensure that a project has coverage in case of accident or injury. Projects should be planned with the support and oversight of municipal staff - these road safety professionals are not only a valuable resource, but will also ultimately approve or deny project proposals, often on the perception of risk.

PROJECT TEAM

Identify Project Leader

The groups or individuals championing a project must be identified and confirmed at this stage. It may be the case that those doing the initial brainstorming are not the ones best suited to carrying the project through the design, implementation, monitoring, and maintenance stages. The project leader may be a municipality or a non-municipal entity.

Where the project is led by a group other than a municipality, project approval and frequent communication with the municipality is required and helps to ensure that staff are aware of and support the upcoming project and can help work through planning, design, implementation, and other logistics.

Identify Partners and Stakeholders

In addition to the project leader, there are several other stakeholders that will play key roles in the project. Potential stakeholders include:

• Politicians (local, provincial, and/or federal).

• Municipal staff across a number of departments, including transportation, engineering, planning, parks and recreation, and/or public works.

• Additional government stakeholders and departments (First Nations, TransLink, emergency services, waste collection, etc.). .

• Key community stakeholders, such as health authorities, advocacy organizations, community groups, school districts (as well as administration, parents, and students), residents, business owners, business improvement associations (BIAs), local artists, academic institutions, and other relevant community members.

When determining who to target for team building and community engagement, look at the demographics of the area and strive to ensure that the group engaged in the project is representative of the community. This means applying an equity lens – as outlined in the guiding principles – and reaching out to specific groups that may be underrepresented or particularly impacted by the project. This includes, but is not limited to, the following:

• Black, Indigenous, and People of Colour

• LGBTQ2+

• Children and youth

• Women

• Seniors

• Refugees

• New Immigrants

• People with disabilities

• Others who have a difficult time accessing or navigating tactical urbanism projects

Build a Team

Once stakeholders are identified, consider reaching out and inviting any key stakeholders to participate in the project planning, design, and implementation processes. Tactical urbanism projects often require significant numbers of staff and volunteers to be successful.

Once you have a project idea in place and on paper, it is critical to identify your staffing needs and recruiting a team to support your project. Enthusiastic, informed, and engaged event staff can provide a positive experience to people passing by and through your project, and help build support.

STEWARDSHIP PLAN

Once the project details and team are established, project stewardship must be considered. This includes regular ongoing maintenance of the tactical intervention, monitoring and data collection, project evaluation, and long-term project stewardship.

Monitoring and Evaluation

Monitoring is required for identifying maintenance and functionality issues, allowing the design to be adjusted as needed. Additionally, it is crucial for evaluating the successes, failures, and lessons learned for each tactical urbanism project. Evaluation can include formal or informal reports and should be shared with stakeholders, the public, and Council (see Phase 4).

Choosing what to monitor and setting the evaluation criteria should relate back to the purpose, goals, and definition of success outlined in the Project Details task above. Both quantitative and qualitative data can be collected, including monitoring how the project is used, collecting user feedback, conducting multi-modal traffic counts, and assessing financial impacts. More information about data collection is provided in Phases 3 and 4.

Maintenance and Stewardship

Depending on the project type and duration, regular street maintenance such as street sweeping, waste removal, and snow storage and removal will be required. This should be considered at the planning stage to ensure that the design accommodates maintenance practices and equipment. Additional project-specific maintenance may also be required (e.g. reconfiguring traffic cones that get moved).

Beyond regular maintenance, there needs to be a plan in place for determining what happens to a temporary project as it ages – e.g. paint will begin to fade, low cost materials may get damaged or go missing, etc. Identify project ownership, governance, and funding to ensure the ongoing stewardship of a project.

- A municipality may agree to maintain a project over the long term.

- Alternatively, a stewardship agreement can be developed which enables an organization or municipality to partner with the community to develop, program, and maintain the space. Partners can include community groups, neighbourhood houses, non-profit organizations, business improvement associations, institutions, and others.

Project Conclusion

At the end of the tactical urbanism project's lifecycle, it is either removed or transitioned into a permanent project. More details on this transition is provided in Phase 4.

COMMUNICATIONS PLAN A communications plan is important for ensuring that the right people are contacted at the right time and in the right way. It can lay out both internal project planning communications and external stakeholder engagement and project promotion. A communication plan typically contains the following elements:

- Internal communication schedule for project planning and design

- Engagement goals and key messages

- Communications timelines, including promotion and reporting

- Identification of stakeholders

- Identification of preferred communication methods for promotion (e.g. news, social media, mailouts, flyers, signage, etc.)

- Identification of onsite communication methods (signs, pavement markings, etc.)

PHASE 2: DESIGN

The design phase takes the ideas from Phase 1 and works out the details that will enable successful implementation. It is recommended to work closely with municipal staff throughout the design stage. The municipality should already be fully aware of and in support of the project by the time the formal permitting or approval stage is reached.

PHASE 2: DESIGN

CONSIDER SITE CONTEXT

DEVELOP CONCEPT

PERMITTING / APPROVALS PROCESS

REVIEW WITH MUNICIPAL STAFF / DEPARTMENTS

CONSIDER SITE CONTEXT

Site Visit

The site visit is important to record existing conditions, analyze details, and collect measurements. A virtual site visit using Google Streetview and available photos can help at a high level, but in person visits allow a more detailed, up to date assessment. Take as many photos as possible.

The site visit could also include interviewing local users, residents, and businesses to get a sense of how the space currently functions and what changes could be beneficial.

Assess Site Role and Function

Think through the site's role and function as a corridor and public space. Streets serve a number of dynamic, overlapping functions that can change depending on the time of day and day of the week. Make sure to identify the road classification and surrounding land uses, and determine whether it is part of the regional Major Road Network or Regional Truck Route Network. Consider the following street functions and elements:

- Mobility (walking, rolling, using a wheelchair or mobility aid, cycling, transit, goods movement, and driving)

- Access (driveways, laneways, building entrances, etc.)

- Business impacts (decreased visibility, loss of parking)

- Parking (paid vs. unpaid, accessible stalls, special permits/restrictions) and loading zones (taxi, ride hailing, delivery)

- Emergency vehicle access

- Accessibility considerations (creation of unfamiliar environments, obstacles, etc.)

- Waste management

- Public utility access (fire hydrants, utility grates, etc.)

- Natural elements such as trees and other vegetation that provide shade, habitat, and help to absorb greenhouse gas emissions)

- Environmental health risks (e.g. noise pollution, traffic or industry related air pollution, urban heat island effects, etc.)

- Stormwater management

- Placemaking elements (do people gather, sit, shop, eat, and/or socialize in the space? Who are the current users of the space? Who is currently excluded from the space or feels unsafe/unwelcome, and why?) Placemaking elements (do people gather, sit, shop, eat, and/or socialize in the space? Who are the current users of the space?)

Streets classified as arterials or collectors have higher motor vehicle speeds and volumes, making them more challenging for tactical urbanism projects. Additionally, any project conflicting with transit routes/stops, deliveries, or waste collection is more complicated and must be coordinated with the impacted parties. Existing and upcoming construction projects in the vicinity of the proposed location must also be noted, as these could conflict directly with the proposed project. Municipal staff can provide detailed information pertaining to site condition and conflicts. Reach out to different departments (e.g. transportation, engineering, public works, planning, or others) when considering site context.

As noted earlier, any temporary modifications to the road network or to road capacity must be reviewed by the municipality's engineering department. Furthermore, any temporary changes on (and/or providing access to) the Major Road Network or the Regional Truck Route Network require municipalities to seek approval from TransLink. If tactical urbanism projects will have any potential impacts on transit operations, TransLink and Coast Mountain Bus Company (the contract operator for bus transit services in Metro Vancouver) should be contacted early in the process so that any issues can be identified and mitigated.

Consider whether the current design is operating as intended, and whether it is service the needs of all potential users. Apply an equity lens and identify Certain users who may be currently unable or unwilling to use the space due to safety, discomfort, the history of the site, or simply a lack of space – for example, there may be very few cyclists due to high motor vehicle speeds and volumes and a lack of comfortable bicycle infrastructure. Strive to create an inclusive design that considers the diverse needs of the community.

DEVELOP CONCEPT

Developing the concept design should be a collaborative and iterative process. At this stage, the general idea should be firmly established, and now the final details need to be confirmed. The following details should be considered:

Site Plan

Create a site plan with sketches or drawings depicting the vision for the project. This will help to identify and mitigate any potential conflicts.

ACCESSIBILITY Tactical urbanism projects should be designed to be universally accessible, allowing people of all ages and abilities to utilize the new temporary space. For example, if a temporary pedestrian space is added adjacent to the sidewalk at street level, a ramp should be provided to allow access for people using mobility devices or strollers. Tactical urbanism projects should not make the environment more challenging to navigate for people with reduced mobility, vision, hearing, or comprehension.

Avoid creating tripping hazards and ensure that materials are cane detectable and negotiable with mobility devices. For example, slatted surfaces like those often used to build temporary patios can be difficult to navigate for people with mobility devices. A clear pedestrian through zone at least 1.8 metres wide should always be maintained – do not block the sidewalk with signage, cones, or other materials. Consider the location of accessible parking spaces and the access requirements of adjacent businesses or services. Additional accessibility considerations are provided throughout this toolkit.

Materials Plan

The type, quantity, and cost of materials must be confirmed, including equipment and tools, traffic control devices, landscaping, furniture, signage, and pavement markings. The materials should be sourced and acquired as early as possible (see Phase 3 below).

Consider materials through the lens of environmental sustainability, choosing materials that can be reused, repurposed, or disposed of in a way that minimizes landfill waste.

Be sure to consider the storage, transportation, and clean up/disposal requirements for all materials. See Appendix A for additional details on materials.

In addition to any required signage and pavement markings, informal signage and pavement markings can be used to provide temporary information or directions and add vibrancy to the project. These signs and pavement markings can involve a range of materials depending on the context. The signage and pavement marking plan should outline all required and additional signs and pavement markings, including the materials and sign production. Many municipalities have their own (or access to) a professional print shop and may be able to assist in the creation of custom signage. In some cases, especially for rapid implementation, simple handmade and home printed signs can suffice, although weather conditions should be considered. Signage can be provided in multiple languages depending on the community context in order to create a more inclusive and accessible space.

Traffic devices (e.g. traffic cones, barricades), signage, and pavement markings are often required for wayfinding, regulating behaviour, and providing information about the project. The Transportation Association of Canada (TAC) Manual of Uniform Traffic Control Devices for Canada (MUTCDC) provides national standardization for road signage and pavement markings and can be referenced for regulatory signs, warning signs, temporary condition signs and devices, and pavement markings. This is important for technical traffic control aspects (e.g. creating detours) and should be reviewed with municipal staff in the transportation, engineering, and/or public works departments.

Staffing/Volunteers

As outlined in Phase 1 above, tactical urbanism projects often require a large team of staff and volunteers to be successful. At the design stage, a specific list of tasks should be developed for the remaining steps in the process, including design, implementation, and clean up. Tasks should then be assigned to individuals or teams.

Programming

Some tactical urbanism projects, especially those focused on placemaking, can involve programming. This can include art, music, games, food and drinks, and other forms of entertainment. Part of designing the concept is considering whether programming is appropriate, then determining the feasibility and logistics, including:

- Additional materials

- Staff and/or volunteers

- Scheduling

- Permits

- Electrical hookups

- Additional costs

Municipalities regulate public performances, noise levels, and the sale of food, drinks (especially alcohol), and other goods and services through bylaws and permits. It is important to coordinate with municipal staff and any other applicable entities such as local health authorities when planning any event programming.

PROGRAMMING IN THE COVID-19 ERA
For the foreseeable future, programming should be considered very careful through the lens of ensuring public health and safety given the COVID-19 outbreak. Programming that encourages large gatherings is not appropriate at this time. Any programming or other elements of a tactical urbanism project should be designed in a way that allows physical distancing and does not interfere with the safe access or mobility needs of other street users

Schedule

Finalize the project schedule and timeline, including date, duration, and removal. Consult municipal staff and local stakeholders to identify any scheduling conflicts (e.g. construction, planned maintenance, events).
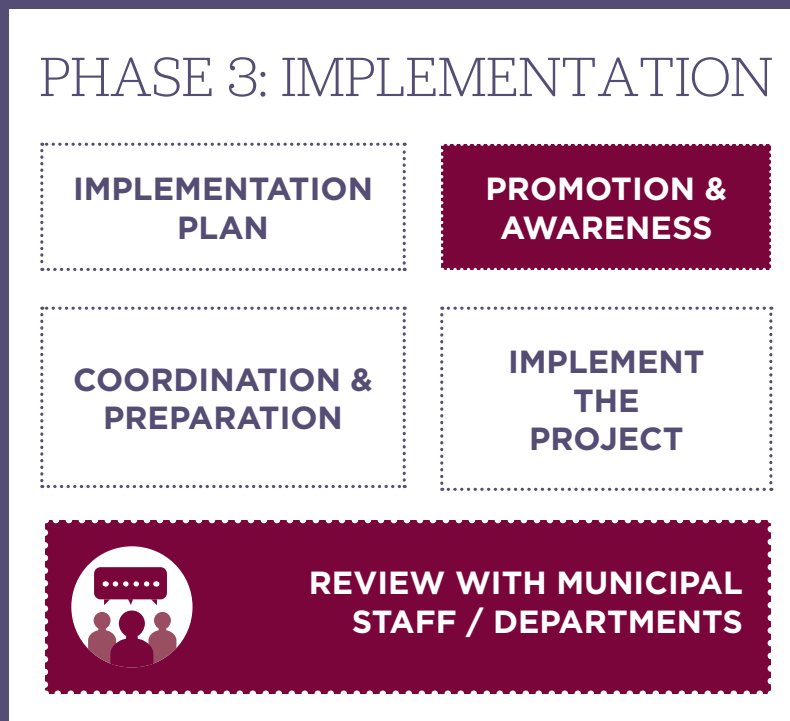
PERMITTING/APPROVALS PROCESS

The permitting/approvals process is where formal permission is granted to implement the project. This step involves working closely with the appropriate municipal staff to address specific design concerns and logistics. It is an iterative process that may require design alterations.

When the tactical urbanism process is being led by a municipality, this step may take the form of internal approvals from the appropriate department (e.g. engineering) and may require an internal memo or report. If the project is led by non-municipal groups, a formal permit will be required. This process will differ by municipality and multiple permits may be required (e.g. event permit, street closure permit, etc.). When in doubt, contact the municipal engineering department for information. Permits can require a number of details about the proposed project, including but not limited to:

- Applicant information (contact information for project leader and organization)

- Project description (purpose, location, and site plan)

- Timeline (date of installation, duration, and removal)

- Design details and context-specific considerations (e.g. impacts on parking, transit, accesses, etc.)

- Monitoring and evaluation metrics

- Project partners or supporters (local businesses, residents, etc.)

PHASE 3: IMPLEMENTATION

Once the design is finalized and permits and approvals have been obtained, an implementation plan can be created. Coordination with municipal staff and other external stakeholders is very important at this stage.

PHASE 3: IMPLEMENTATION

IMPLEMENTATION PLAN	PROMOTION & AWARENESS
COORDINATION & PREPARATION	IMPLEMENT THE PROJECT

REVIEW WITH MUNICIPAL STAFF / DEPARTMENTS

IMPLEMENTATION PLAN

Safety

It is crucial to ensure the safety of all road users, including staff/volunteers assisting with implementation, by identifying all potential safety concerns and planning mitigation measures. Appropriate personal protective equipment (PPE) should be worn by all staff and volunteers. If safety cannot be ensured, circle back to the design stage or select an alternate location.

Tactical urbanism projects are still a relatively new concept for many municipal staff and elected representatives. As with any new and unknown initiative, there can be an initial resistance due to the perception that rapid changes to the built environment can pose a significant risk to users and residents. It is important to address these concerns by having a detailed safety plan in place that demonstrates due consideration of potential risks, while also focusing the conversations on the potential project benefits.

Traffic Control

A traffic control plan may be required for projects occurring on or near active roadways. Coordinate with municipal staff to ensure the proper protocols are in place for redirecting traffic and notifying stakeholders.

Schedule and Logistics

Outline the schedule for the pre-implementation tasks and the day of implementation. This includes acquiring and preparing materials, preparing the site, setting up monitoring equipment, and laying out materials (see Phase 4). Assign roles to each team member and to ensure smooth project delivery.

PROMOTION AND AWARENESS It is important to contact the media in advance of the project and agree on the key messages to convey that promote the purpose and goals of the project. Coordinate with the media to promote the event in advance, cover the implementation process, and follow up stories. Promotion is necessary for alerting all nearby residents and businesses that have not been involved in planning and design about the project. Additionally, raising awareness at a larger scale through social media, news releases, posters, and other communications identified in the communications plan can help showcase the upcoming project and draw people in. This is also an ideal opportunity to recruit volunteers. Rallying as many volunteers and helpers as possible will make implementation faster and easer while building and demonstrating community support for the project.

COORDINATION AND PREPARATION

Coordinate Team and Stakeholders

Communicate with your team and run through the final design and implantation plan one last time. Assign a coordinator for the day of implementation to ensure everything runs smoothly. Arrange for one or more people to bring cameras and notebooks to document the implementation. Contact any internal and external stakeholders required for implementation (e.g. public works, emergency services, local businesses, etc.). If volunteers are required, ensure they understand their schedule and roles and answer any final questions.

COMMUNICATION BRIEFING Identify one or more spokespeople from the project team that will handle any interview requests on the day of implementation. You may run into both support and opposition to your project. Talk to your team about how to deal with interactions with the media, businesses, residents, and other passersby.

Gather and Prepare Materials

Materials should be gathered as far in advance as possible to guarantee availability, and transportation to the site should be arranged. Any materials that require professional printing or pre-design and construction should be planned and completed well in advance.

Clean and Prepare Site

Depending on the type of project and existing conditions, the site may need to be cleaned or prepared. This could include priming for paint, street sweeping, and other maintenance. Coordinate with the municipal public works department in advance to schedule a time for maintenance.

Set Up Monitoring Equipment

If applicable, set up any temporary monitoring equipment (see Phase 4 for details). If conducting manual counts, interviews, or surveys, prepare the materials and provide training to staff/volunteers who will be administering the data collection. Conducting counts before and after installation is an important way to track the impact of your project. More details on monitoring can be found below.

IMPLEMENT THE PROJECT

Give yourself ample time to set everything up. Expect a few hiccups and be prepared to respond, with extra materials and cleaning supplies, spare camera batteries, a change of clothes, and snacks and water for the team. Keep in communication with team members and be friendly to curious onlookers who ask about the project. Most importantly, have fun and be safe!

For very short, rapid implementation projects the data collection and photos may need to take place that day. For projects with longer timelines, implementation is only the beginning; see Phase 4 for details on what comes next.

RECORD AND SHARE Make sure to document the implementation process – in addition to being fun memories, these photos and videos can be powerful tools for showcasing how simple, yet meaningful and effective tactical urbanism projects can be. Share these images on social media and save them for use in reports and news stories.

IMPLEMENTATION AND COVID-19 Proper physical distancing protocols should remain in place throughout project implementation. Staff and volunteers should be instructed to remain at least two metres apart, and PPE such as non-medical facial masks are be required when social distancing is not possible, as per the latest advice from the Office of the Provincial Health Officer.

PHASE 4: MONITORING, EVALUATION, AND STEWARDSHIP

Once the project is on the ground, work with a range of municipal departments to monitor, evaluate, and maintain the space, following the plan set out in Phase 1.

PHASE 4:
MONITORING, EVALUATION, AND STEWARDSHIP

| MONITOR | EVALUATE & ADJUST | MAINTENANCE & STEWARDSHIP | MAKE PERMANENT |
| REPORT | CLEAN UP | | |

REVIEW WITH MUNICIPAL STAFF / DEPARTMENTS

MONITOR

Monitoring (i.e. data collection) allows people to see the impacts of the project and assess its suitability for long-term application. Both quantitative and qualitative data can be collected. It is useful to monitor both how the space is being used and who is – and is not – using the space. Data collection methods include the following:

User Counts

User counts can be conducted manually using trained staff or volunteers, or automatic count technology can be utilized. Automatic data collection technology includes infrared devices, video, piezoelectric strips, or pneumatic tubes. App-based GPS data may also be acquired, either from publicly available sources such as Strava or by purchasing anonymized cell phone data from Big Data providers. In some cases, particularly interim projects that will be on the ground for an interim timeline, counts should be conducted before and after implementation.

User Feedback

Direct user feedback can by collected by user surveys, either in person or online. Intercept surveys can be conducted, or a designated booth can be set up on site to provide information about the project and elicit feedback. In addition to surveys, testimonials can be gathered to gain more personal and detailed user feedback related to the project. The type of input collected will vary depending on the type and purpose of the project. When collecting feedback, apply an equity lens and strive to accommodate those who may not have access to a mobile device or the internet, people who speak another language, and other people with a disability or other impediment impacting their ability to provide feedback.

Observations

One or more members of the project team should gather observations, including notes, photos, and videos of the project and users. For longer projects, observation and photos should be taken at different times, days, and in different conditions to gain a full appreciation for how the new space functions.[1]

[1] For detailed guidance on observational methods, see How to Study Public Life by Jan Gehl and Birgitte Svarre.

EVALUATE AND ADJUST

Evaluate

Analyze the collected data and watch for overall functionality, including traffic flow, multi-modal access, and maintenance concerns. Identify who is using the space and assess whether or not they are representative of the community. Are there any groups being left out? Is the space functioning how it was intended to function? Compare these observations to your baseline results to evaluate the effectiveness of the project in achieving the stated purpose and goals.

Adjust

Based on the quantitative and qualitative data and observations, make adjustments to the project as needed. Making adjustments shows responsiveness and flexibility, and it can help to quickly alleviate concerns that pop up during the project. This is iterative process – continually evaluate the adjustments and make further changes as needed. All adjustments should be made with the original permit and safety considerations in mind – major alterations would require additional discussion with municipal staff.

MAINTENANCE AND STEWARDSHIP

Ensure that the project site remains well maintained throughout the project lifespan. This includes regular maintenance such as street sweeping, snow removal, and waste collection, in addition to project-specific maintenance, such as moved traffic cones, replacing damaged materials, etc. Project stewardship can involve the municipality as well as community groups or other organizations, as outlined in Phase 1. Coordinate with municipal public works departments for any custom maintenance requirements, such as temporarily moving materials out of the way to enable street sweeping or snow removal.

REPORT Summarize your findings, including key lessons learned and recommendations for future projects. If the project has proven successful, this is an opportunity to make the case for extending the project, permanent adoption, or further interim projects at other locations. Tactical urbanism is a live research project, and promoting the results is important for educating planners and practitioners in other municipalities.

CLEAN UP

Restore Site

Once the project has run its course, remove all materials from the site, including any temporary traffic devices such as signage and cones. If paint or other pavement markings have been applied to the ground, these can be pressure washed to restore the site to its previous condition. In some cases, paint may be left to fade naturally, although this should be observed and removed if it becomes unsightly.

Properly Store or Dispose of Materials

Whenever possible, store and reuse materials for future tactical urbanism projects, as this cuts down on costs and waste. Before storing paint materials, make sure to wash all brushes so they are ready to use for future projects. Recycle or dispose of any materials that cannot be reused or repurposed. Ensure that any materials that cannot be placed in standard compost, recycling, or garbage bins (e.g. empty paint cans) are disposed of properly.

MAKE PERMANENT

Alternatively, where a project has proven successful and gained support from stakeholders, the public, and the municipality (including Municipal Council), it can be made permanent. At this point, a capital project planning process should begin. This will include assessing the project and determining a way to upgrade the materials and create a final, more permanent design.

BICYCLE
BICYCLE
BICYCLE
I WANT TO
RIDE MY
BIKE
BICYCLE
BICYCLE
BICYCLE
I WANT
TO RIDE MY
BIKE
I WANT
TO RIDE
MY BICYCLE
I WANT
TO RIDE IT
WHERE
I LIKE

APPENDIX A: MATERIALS

This section outlines some of the materials that can be used to implement tactical urbanism projects. There are several factors that influence the type of materials that are used for a project, including cost, availability, and the local context. In most cases, however, it is the timeline that influences the choice of materials – projects that are in place for longer periods of time typically require more durable materials. Temporary projects can transition into interim or permanent projects by changing the materials used.

EQUIPMENT AND TOOLS

For most projects, tools are required as part of the implementation process. This page outlines the some of the common tools used. This list is not intended to be exhaustive, and it is possible that several tools may be required to implement one project. Equipment and tools may also be required for maintenance and clean-up.

When acquiring equipment and tools it is worth considering how often the tools will be used, where they will be stored, and the costs associated with them. There may be opportunities to borrow or rent equipment and tools from others, and share resources.

Paint Brush/Roller

Used to: Apply paint onto various surfaces. Can be used for any type of project where paint/pavement markings are required.

Tips:
- Use with duct tape or hard material stencils for straight lines.
- Apply evenly to surfaces.
- Can be purchased from a most hardware stores, or dedicated paint stores.

Marking Wand

Used to: Easily apply spray paint or spray chalk in a straight line, and reduces time bending over or crawling to apply.

Tips:
- Test first to determine appropriate amount of pressure needed to ensure an even application.
- Scale to your project – you may need several for larger/ quick build projects.
- It can be used for a multitude of purposes and projects.
- Available at most hardware stores.
- Long lasting, useful in both decorative and functional paint projects.

Utility Vehicle

Used to: Transport materials and supplies and can help with traffic control during installation.

Tips:
- Consider how materials are loaded and organized.
- Consider the size of the vehicle needed.
- Be cautious storing materials overnight.
- Useful for any project requiring the movement of large objects or numerous amounts of materials.
- Most municipalities will have these types of vehicles in their fleet, as will most vehicle rental agencies.

Additional Tools found at most hardware stores:

Cleaning Materials (Pressure Washer/ Brooms)

Used to: Remove paint and pavement markings when required.

Tips:

• Ensure project site has access to water and/or hose and power at cleaning/removal location.

Tape Measure

Used to: Assist with project layout, ensuring planned measurements are achieved. Particularly helpful to identify pavement marking locations and measuring cross sections.

Tips:

• Good item to procure early and have multiple on hand.

Chalk Line

Used to: Create a straight line, particularly useful for laying out the location of markings and barriers.

Power Drill / Hand Tools

Used to: Assist with assembling furniture, building pallets, drilling holes in pavement to secure barriers and other materials to the roadway, and affixing signage to posts.

Tips:

• Make sure batteries for power drills are fully charged leading up installation. Ensure you have extras.

Utility knives and scissors

Used to: Cut and open materials. Useful for cutting out stencils for road markings, cutting tape, and opening packaging.

Tips:

• Ensure these sharp-edged tools are used in a safe manner at all time and kept out of reach of children.

Personal Protective Equipment (PPE)

PPE can include, safety vests, gloves, goggles, any other equipment that is deemed necessary for the safety of participants.

Used to: Protect individuals implementing the project. Increase visibility of people working in traffic.

Tips:

• Most equipment can be purchased from hardware and even office supply stores.

• Determine the level of PPE required as part of the implementation plan.

• Ensure proper fitting, and that the PPE is worn at all times when on/ near an identified hazard such as an active roadway.

MATERIALS
BARRIER ELEMENTS

Many types of materials can be used to help create both physical and visual barriers between different spaces and users, including moving vehicles and people who are walking, cycling or lingering in a newly created community space. The appropriate type of barrier to use is based on several factors, including the intended function of the barrier, accessibility, safety considerations, the duration of the installation, space constraints, access to materials, budget, and aesthetics.

Barrier elements can be used for a wide range of project types including bike lanes, curb extensions, parklets, street closures, and plazas. They can also be used in several different contexts and applications within these projects, and can vary greatly in size, cost, ease of implementation, and maintenance.

The type of materials and barriers elements used should be a key consideration in the planning stage of your project. It is important to note that traffic control barricades/barriers and signage should be installed in around the project site to indicate a change to the street configuration, and it is important to ensure that the placement of barriers does not negatively impact universal accessibility.

Traffic cones, free-standing delineator posts, barrels, and small planters

Used to: Delineate and reallocate road space as part of a demonstration project. They can be used to designate space for a bicycle and/or pedestrian lanes, parklets, plazas, and indicate a street or lane is closed to motor vehicle travel.

Tips:

- Most municipalities are likely to have access to many of these materials.
- Most are relatively lightweight and reusable for other projects.
- Because these materials can easily be moved around and shift position if contact is made, frequent inspection and monitoring is required.
- These materials need to be used with other traffic control devices, especially proper signage.
- Can be used for demonstration and interim project timelines.

Plastic or metal traffic control barriers

Used to: Provide notification of a change in street use, restrict vehicle access, denote a separated facility/space. Typically used for shared streets, street closure, or pop-up bike lane, and plaza projects. Rapid installation and official signage make these a good choice for many tactical urbanism projects.

Tips:

- These barriers are typically to be lightweight, and easy to install.
- Very common items in municipal public works inventories.
- Useful for temporary or interim projects, but longer-term projects should consider more permanent materials.
- They can shift so regular inspection and relocation is important.

Planters

Used to: Provide continuous separation for bicycle and pedestrian lanes, function as barrier elements to restrict motor vehicle travel at street closures and used as landscaping features for placemaking projects (see landscaping materials for more details). Planters are a great way to enhance the aesthetic of a project denote the separation of usage/space.

Tips:

- Depending to the size and durability of the planter, they can be used for various project timelines (demonstration to permanent).

- Most garden and hardware stores will carry small to medium planters on a seasonal basis. It is helpful to procure these well in advance of implementation.

- Ensure that you have a long-term storage/ sustainability plan in place.

- Depending on the length of your project, you may need to regularly water and weed as required, so consider maintenance when planning.

- When installing larger concrete planters, ensure your installation plan includes the required human power or equipment for safe installation.

- Additional tips on planters can be found in the Landscaping Materials section.

Plastic Jersey Barriers

Used to: provide a highly visible, physical barrier between road users and vehicles. They can either be used as a continuous barrier, such as in pop-up bike lane projects, or as a standalone barrier to prevent or restrict access, such as part of shared street project.

Tips:

- These barriers can be air, sand or water filled.

- They are often found in municipal public works inventories for use on road construction projects.

- Plastic barriers are very useful for temporary or interim projects, or for pilot projects if sufficiently weighted.

- Depending on the material used to fill the barrier, barriers can shift easily, regular inspection and relocation as needed should be part of the long-term maintenance plan.

- Concrete Jersey Barriers can be used to provide a more durable/permanent alternative to a plastic barriers for longer term projects.

Temporary fencing

Used to: Provides an instant physical and visual barrier. It can be useful in situations requiring long sections of separation, such as a bike lane or open area for the creation of a plaza or gathering space.

Tips:

- Ensure the height of the fence does not interfere with sight lines, and that there are regular gaps in the fence to allow for accessibility and pedestrian/cyclist crossings.

- If installing near a cycling corridor/facility, look for fencing that will not "catch" the handlebars –of passing cyclists.

- Temporary fencing should be considered for demonstration and interim projects, but you may want to consider more permanent fencing for pilot and longer term projects.

- Temporary fencing can be purchased at most hardware stores, or rented from equipment rental suppliers.

- Consider the aesthetic of your project when selecting fencing – make sure it works with the other elements of your project.

- Temporary fencing can be easily moved by the wind or other people, so ensure that your maintenance plan includes regular inspections, repairs and adjustments as needed.

MATERIALS
BARRIER ELEMENTS

Continuous barriers

Used to: Help create a new curb line or barrier. Several barrier elements come as or can be set up as continuous barriers, including parking stops, planters, fencing etc. They can be used for a variety of projects including separating cyclists and pedestrians from motor vehicles. Some treatments can be more aesthetically pleasing than others, offer different levels of physical protection between users, and be in place for varying lengths of time. Ensuring universal accessibility is particularly important when installing a continuous barrier to ensure the safe movement of people through the project area. The type of continuous barrier used will depend on context, purpose, and the timeline for the project.

Tips:
- Acquiring continuous barrier materials may require additional time as they may not be readily available within a municipality or purchased from a store.
- Installing these barriers can be a time-consuming process, so ensure that you have an appropriate amount of support to ensure rapid deployment as needed.
- Temporary, adjustable barriers can also provide an opportunity to trial different facility widths and collect user feedback.

Traffic Cones
Project Example:
Temporary Bicycle Lane

Timeline:
Demonstration (1 day to 1 week)

Plastic Jersey Barriers
Project Example:
Pop-up Bicycle Lane and Temporary Pedestrian Lane

Timeline:
Demonstration (1 day to 1 week)

**Free-Standing
Delineator Post**
Project Example:
Temporary Bicycle Lane
Timeline:
Demonstration (1 day to 1 week)

**Plastic Traffic
Control Barrier**
Project Example:
Pop-up Bicycle Lane
Timeline:
Demonstration (1 day to 1 week)

**Metal Traffic
Control Barrier**
Project Example:
Temporary Road 'Closure'
Timeline:
Demonstration (1 day to 1 week)

Small Planters
Project Example:
Pop-up Protected Bicycle Lane
and Temporary Road 'Closure'
Timeline:
Demonstration (1 day to 1 week)

**Small Rubber
Parking Stop**
Project Example:
Parklet
Timeline:
Interim (1 week to 1+ year)

**Affixed Delineator
Posts and Planters**
Project Example:
Parklet / Curb Extension
Timeline:
Interim (1 week to 1+ year)

Large Planters
Project Example:
Plaza
Timeline:
Interim (1 week to 1+ year)

Concrete Jersey Barriers
Project Example:
Activated Laneway
Timeline:
Interim (1 week to 1+ year)

MATERIALS
BARRIER ELEMENTS

Fence Barrier
Project Example:
Designated Pedestrian Lane
Timeline:
Demonstration (1 day to 1 week)

Photo credit:
City of Guelph

'Wave' Barrier
Project Example:
Pop-up Bicycle Lane
Timeline:
Demonstration (1 day to 1 week)

Delineators on Barrier Curbs
Project Example:
Separating Travel Direction
Timeline:
Interim (1 week to 1+ year)

Precast Concrete Curb
Project Example:
Pilot Protected Bicycle Lane
Timeline:
Interim (1 week to 1+ year)

Affixed Delineator Posts
Project Example:
Pilot Protected Bicycle Lane and Curb Extension
Timeline:
Interim (1 week to 1+ year)

Photo credit:
City of North Vancouver

Planters
Project Example:
Pop-up / Pilot / Permanent
Timeline:
Demonstration (1 day to 1 month)
Interim (1 week to 1+ year)

Concrete Barriers
Project Example:
Temporary Protected Bicycle Lanes
Timeline:
Demonstration (1 day to 1 month)
Interim (1 week to 1+ year)

MATERIALS
LANDSCAPING

Landscaping elements such as flowers, plants, and shrubs can be used to enhance the aesthetic of different projects and spaces. They also have several positive environmental impacts while helping to redefine and create places people want spend time. They can be used as part of a wide variety of projects to help define space, act as barrier elements, and provide shade. Depending on the size and material, they can be used for demonstration and longer-term projects. In many cases landscaping materials can be reused several times for other projects. Procurement, storage, transportation, and ongoing maintenance of plants and landscaping materials can be one of the biggest challenges. Installing either artificial or natural grass or plants can immediately transform a space and people tend to be drawn to green spaces.

When selecting landscaping elements, it is important to consider the impact on sightlines, the species most appropriate for the local climate, and the level of maintenance and stewardship expected.

Astro turf (Synthetic Grass)

Used to: Rapidly 'green' pavement and other urban surfaces. It can be used to help define a designated space including a parklets, plazas, and park/play area.

Tips:
- Astro turf can be a relatively inexpensive material to enhance a space. It is often less expensive than grass (sod).
- It can be easily reused for other projects.
- May need to be affixed if left overnight or if it is a longer-term project.
- Ensure a smooth surface and that it does not create a tripping hazard.
- Can be purchased at most hardware stores but ensure sufficient stock is available in advance.
- Typical usage is for temporary or interim projects, but depending on usage and installation, can be installed on a long-term basis.
- Depending on usage and how it has been secured, it may need to be inspected and adjusted on a regular basis.

Live grass (Sod)

Used to: Rapidly 'green' pavement and other urban surfaces. It instantly creates a natural surface, and is often used as part of temporary parklets, plazas, and parks.

Tips:

- Grass is less appropriate for longer-term projects unless it is properly installed and well maintained.
- Grass can be more expensive than astro turf, but easier to procure as it is widely available at most garden centres.
- Installation and clean up can be messy, and depending on the size of the project, may require several helpers.
- Storing sod can be challenging, think about how to store and re-use, plant, or compost after use.
- Ensure a smooth surface and that the material does not create a tripping hazard.

Planters (trees, shrubs, and flowers)

Used to: Provide a barrier between motor vehicles and other users, define a space, or beautify an area. They can be used for a variety of projects, including as a continuous barrier along a bicycle lane, defining a plaza space, or as part of a parklet.

Tips:

- Smaller plants are easier to handle and install, they can be used as part of demonstration projects. They may need to be anchored down in some cases.
- Larger plants are more suitable for long term projects.
- Maintenance and stewardship is an important consideration when selecting plants.
- There are some planters on the market that can self-water, helping to reduce ongoing maintenance requirements.
- Can be reused for future projects as needed.
- Can be purchased at most garden centres and hardware stores..
- Smaller planters can be quite inexpensive, but larger planters can also be quite cost prohibitive.
- Ensure that you have the appropriate level of lifting/carrying capacity for implementation – these can be heavy to move and install.
- These materials can be a potential legacy if trees are gifted/planted following the conclusion of the project.

MATERIALS
FURNITURE

Furniture is used to help create an inviting space for people to gather, socialize, and rest. Like other materials, the style and type of furniture best suited for your project will depend on the intent of the project, how long it will be on the ground, and the overall project budget. For demonstration projects, consider lower cost and recycled materials such as hay bales and crates, or "build your own" temporary furniture can be used instead. Tables, chairs, and umbrellas are other common types of furniture used. Movable furniture can be easily installed and removed daily and allows for easy rearrangement and positioning. Some furniture may be installed that is more permanent in nature, staying out for extended periods of time, and not being moved around regularly. Furniture is typically installed in temporary or permanent plaza or parklet spaces, and should be monitored and inspected regularly - for example, every 24 to 48 hours.

Municipalities may already have a preferred suppliers and guidelines for furniture. Ensure furniture is cane detectable, and that placement does not obstruct a through zone.

Build your own
Demonstration (1 day to 1 week)

Preassembled
Demonstration (1 day to 1 week)
/ Interim (1 week to 1+ year)

Movable Tables, Chairs, and Umbrellas etc.
Used to: Provide a space for seating and resting that can be repositioned and easily moved around by users or project team members. Can be preassembled or built in place, and are often found in plaza, parklet, and laneway activation projects, or anywhere you want to encourage people to gather. Umbrellas can provide shade for people sitting nearby, and protection from the rain.

Tips:
• Furniture is often available in a variety of colors that can be used to enhance the streetscape and aesthetic.
• Procure furniture early in the process to ensure the best selection of colors and design that is appropriate for your project.
• Requires ongoing maintenance, and in some cases will need to be set up and removed daily.
• Ready to assemble furniture can be purchased from numerous online sources, or templates can be downloaded for construction by local woodworking shops. Great for multiple projects due to ease of transport and quick assembly.
• Quick assembly furniture is suitable for demonstration and interim projects, but fully constructed furniture should be considered for pilot projects.
• Umbrellas may be borrowed from local businesses or re-used for other projects. Consideration should be given as to how umbrella will be anchored in place.

Other furniture examples to consider include:

Hay bales

- Inexpensive and quick to set up.
- Can be composted or donated at the conclusion of the project.
- Solid weight may require many hands to place.
- May take a some searching to source.

Crates

- Can be quite inexpensive and easy to procure from grocery stores.
- Easily adjustable.
- Can be wood, or painted to align with project.

Shipping pallets

- Easy to procure from grocery stores, inexpensive.
- Can be set up in a variety of configurations.
- May be available from local businesses as a donation.

Picnic tables

- Easily procured.
- Offer comfortable seating for areas with food services.
- Good choice for projects that seek to provide a space to gather and linger for longer periods.

Benches

- Can be a variety of materials, including wood and concrete.
- Offers seating for plazas and laneway activation projects.
- Can be easily adjustable for a variety of contexts.

Concrete blocks

- Offer more permanent seating or space defining materials.
- Can be procured from many local landscaping businesses.
- Heavy weight may require equipment to install.

The use and placement of furniture should be considered during COVID-19

Benches
Interim (1 week to 1+ year)

Shipping Pallets
Demonstration (1 day to 1 week)

Photo credit: City of Vancouver

Concrete Blocks
Interim (1 week to 1+ year)

Picnic Tables
Demonstration (1 day to 1 week) / Interim (1 week to 1+ year)

MATERIALS
SURFACE TREATMENTS

Surface treatments are a common feature in many tactical urbanism projects and can be a highly visual and engaging portion of your project. These types of projects offer an opportunity to collaborate with local stakeholders and residents to design and implement, and allow for a broad range of participants to contribute to the project – even those passing through the project area. When done with community contributions, they can also help local residents and businesses interact with and view the streets in their area in a new light, with a greater sense of ownership and connectivity.

When considering implementing various designs, either on a roadway, sidewalk, pathway or some other public space, it is critical to consult with local engineers and planners to ensure that the proposed design does not conflict with existing road markings. Consideration should also be given to persons with visual impairment - dark colors may appear as voids or holes, so should be avoided if possible.

Striping
Used to: Striping typically serves a functional purpose – to either indicate the separation of space between different road users, indicate a pedestrian crossing, or indicate a space that is not to be used for travel or storage. They are often used are part of pop-up bike lane projects and pedestrian crossing improvements.

Tips:
• Marking wands and chalk lines are extremely useful for applying striping to ensure that lines are straight. They also eliminate the need to crawl or crouch to apply.

• If a longer-term project, may require regular reapplication and touch up.

• Depending on the amount of use, striping marking may last for a few weeks or months. Regular inspection and reapplication should occur, as necessary.

Information / Regulation

Used to: Indicate direction of travel, designated facility type (ie. bicycle or pedestrian stencil), turning lanes, stop lines etc. Most often used in projects that reallocate road space, including pop-up pedestrian or cycling corridors, pop-up plazas that change road configurations, and curb bump outs or other projects that narrow the roadway.

Tips:

- Use stencils as much as possible to ensure consistency of design. Municipalities may have stencils on hand, or access to professional line marking machinery.

- Marking wands and chalk lines very useful for these markings to ensure clear, consistent markings.

- Depending on the amount of use, striping marking may last for a few weeks or months. Regular inspection and reapplication should occur, as necessary.

Decorative

Used to: Beautify urban spaces and provide an opportunity for community contribution and participation. Decorative markings can be used for all kinds of tactical urbanism projects from laneway activations, bicycle lanes, pedestrian plazas, parklets etc. Decorative surface treatments are often the visual highlight of tactical urbanism projects and offer an instant impact at low cost.

Tips

- As much as possible, work with local stakeholders, such as schools, business groups, and community organizations to design and install a decorative surface treatment. Give yourself plenty of lead time to collaborate on the design. Reach out to local artists to see if they would be interested in participating.

- Make the decision early on to either clean up and remove these projects when they begin to wear or have a maintenance plan in place to ensure your project remains visible and vibrant.

Paint

Used to: Mark and add colour to surfaces, paint can be used for several applications including, denoting road markings, murals, and furniture. It is a very common material for almost all tactical urbanism projects. Painting surfaces with local groups and stakeholders also offers an excellent relationship building and public engagement opportunity.

Tips:

• Seek water-based paints where possible to lessen the environmental impact.

• Engage with a hardware/paint store employees to determine the best colors/ types of paint for your tactical urbanism projects.

• Ensure that you have enough paint, rollers, and trays on hand for the size of your project, and plan for what to do with what is left.

• Maintenance plan should include consideration for either removal or long-term upkeep.

Chalk

Used to: Quickly create temporary artwork that can be easily removed. It can be used to allow a wide range of participants to directly contribute to a project and activate a space. It can be used for in almost all tactical urbanism projects, but is a must for any projects near schools, or where you are likely to encounter children and families.

Tips

• Chalk is readily available at many toy and dollar stores. Depending on the scale of your project you will want to purchase the required amount of chalk early, especially for large scale projects.

• Most suited for demonstration projects but can be used for longer-term projects and in plazas/open areas if supplies are restocked.

Spray Paint

Used to: Paint stripes, fill stencils, and beautify public space. Particularly useful for larger applications that require a large amount of markings in a short timeframe. Can be used for most tactical urbanism projects.

Tips:

- Longer lasting than chalk, but not as long lasting as paint unless applied in several coats.
- It is best applied using a marking wand to ensure straight lines and consistent application.
- While available at most hardware stores, for large scale projects it is advisable to secure the colors and types of spray that you will need well in advance to ensure you have enough for your project.
- Maintenance plan should include consideration for either removal or long-term upkeep.

Spray Chalk

Used to: Quickly and inexpensively mark up/ decorate a surface. Can be used for many types of tactical urbanism projects that require the application of paint/chalk across large areas. A great tool for children to use, as unlike spray paint it is non-toxic and easy to wash off.

Tips

- Available at most hardware stores and dollar stores. Supplies are often limited so it is helpful to secure materials well in advance.
- Higher quality projects are likely to be more expensive.

Stencils

Used to: Consistently replicate a symbol or marking. Useful for any tactical urbanism project that is looking to repeat the application of the same design. This can include decorative patterns and information markings. Stencils can either be a pre-existing standard stencil, or specifically created for your project.

Tips:

- Many materials can be used, but cardboard should only be considered when only a few uses are planned. Plastic sheeting is more suitable for numerous applications or repeated across projects.

- Many municipalities will have existing plastic sheeting and/or stencils that can be used with permission, such as cycling and pedestrian markings.

- Creating your stencils with local stakeholders/organizations can be a good pre-event collaboration/engagement opportunity.

Tar paper

Used to: Create temporary road markings that can be installed and removed quickly without leaving markings on a surface. Suitable for use in number of different types of tactical urbanism projects, including pop-up cycling facilities, pedestrian plazas, and crosswalks.

Tips:

- Available at most hardware stores, but call ahead to ensure sufficient stock for the size of your project is available.

- Most suitable for projects that require rapid implementation as they can be colored/decorated in advance of the project, and quickly applied on the day of the event.

- Only suitable for temporary tactical urbanism projects, so long-term maintenance is not a consideration.

No-slip compound

Used to: Ensure the safety of users on painted surfaces by mixing a grit into the paint before it is applied. Should be used for any project that has paint applied to a street or pathway surface that will be walked, cycled or driven upon.

Tips:

- Determine quantities needed and secure early, as it can sometimes only be available in limited quantities.
- Read the instructions for paint/grit ratio - you will likely need more than you think you will!
- Ensure that staff and volunteers know the amount of grit that is required for a volume of paint, and that all surface areas receive the correct amount to ensure traction is provided.

Temporary ramps

Used to: Provide access from the sidewalk to the street and enhance accessibility. Ramp slope should not exceed 8%. Typically used for temporary projects.

Tips:

- Brightly coloured ramps help to improve visibility.
- Ramps made of a sheet of plywood with dimensional lumber underneath are low maintenance but durable.

MATERIALS
SIGNAGE

Regulatory and Warning Signage

Used to: Convey speed limits, right-of-way control, turning restrictions, lane usage, no entry, parking restrictions, provide advance indication of conditions or other direction to road users. Required for any tactical urbanism project that changes the speed, direction or road allocation.

Tips:

• If you are using regulatory signage for your project, consult with municipal staff to ensure that it is MUTCDC or local standards compliant, and properly located as per TAC and MUTCDC guidelines.

• Municipal public works departments often have this signage on hand.

• Should be installed at the start and end of any new facility that impacts road users.

• Can be used on a temporary, interim or pilot basis.

• Will require regular inspection and potential relocation as required.

Information Signage

Used to: Communicate information about your project or other initiatives to the general public. Suitable for most tactical urbanism projects – an important communication tool.

Tips:

• Include the logo of the organization(s) initiating the project.

• Signage can be affixed to a post or other permanent structure, or temporarily displayed on a sandwich board.

• Sandwich boards can be purchased or rented at most printing shops, call in advance to ensure they have stock available for your project.

• Unless securely fastened, may require regular daily setup and storage. Consider more permanent installation for interim and pilot projects.

• Municipalities may have a communications team that can assist with the creation of informational signage.

• Suitable for most tactical urbanism projects, from demonstration to pilot.

APPENDIX B: PROJECT IDEAS

This section provides examples of various tactical urbanism projects, including a brief description of the project types, their applicable contexts, materials used, and considerations for planning, design, implementation. These real-life examples demonstrate how to apply the process guidance provided in Section 2. This list of projects is not intended to be exhaustive.

STREET CLOSED TO MOTOR VEHICLES

- **Description:** The full width of the street is closed to motor vehicle travel, with access maintained for essential motor vehicles as required (e.g. vehicles and deliveries). The street can be used and programmed for various purposes, including neighbourhood school activities, car free celebrations, or simply to provide more room to bike, walk, and roll. This type of street closure could be a standalone event, or it could occur annually, monthly, weekly, or even daily (e.g. short-term to accommodate an immediate need).

- **When to Try This:** Can be implemented in various contexts, including arterial, collector, and local streets. This type of project is most appropriate along streets with limited intersections and access requirements, such as driveways, parking lot accesses, and loading zones.

- **What to Use and Consider:**
  - » Signage – Required

    - › Road Closed and Entry Prohibited signs should be attached to barricades at the start/end of the project extent and at all intersecting streets.

    - › The end of the project extent should be signed so users know where conditions end.

    - › Shared Pathway sign or other local custom shared bicycle and/or pedestrian space sign should be used.

    - › Turn Control, Lane Designation, and/or Detour signs may be required to direct traffic in advance of the closure.

    - › Cyclists Yield to Pedestrians signs may be used at crosswalks within the street closure area.

    - › Custom signage with project information and temporary wayfinding can be added.

  - » Barrier Features – Required

    - › Multiple light or heavy barrier features should be placed at the start of the closure and at all intersecting streets.

    - › The number of barrier features will depend on the width of the street.

    - › Barrier features should be placed to block motor vehicles but to allow pedestrians and cyclist access (minimum 2.0 metre access clearance).

  - » Pavement Markings – Not Required

  - » Programing, landscaping elements, beautification – Optional

- **What to Do:**
  - » Information about the project should be communicated to all stakeholders.

  - » Consider the access impacts on all road users.

  - » Detours must be provided for motor vehicles, and access for essential vehicles should be maintained.

  - » Inspection should occur (depending on length of time the project will be on the ground) to ensure that temporary traffic control devices have not shifted.

EXAMPLE PROJECT:

LOCATION:
City of Windsor, Ontario

PROJECT TYPE:
Safe and Healthy Streets Pop-up Event,
Vincent Massey Secondary School and
Glenwood Elementary School

TIMELINE:
Demonstration (one day event)

- This event was part of the community engagement process during the development of the City's Active Transportation Plan, Walk Wheel Windsor.

- The one-day event was planned to coincide with Earth Day activities at the schools.

- The road directly in front of Vincent Massey Secondary School was closed off to vehicles. This site was selected as part of an effort to reduce congestion and dangerous driving behaviour around the schools, and to raise awareness of safe and active school travel. Parents were encouraged to allow students to walk a block or two to the school.

- This event focused on enabling students from both schools to play and draw on the street and highlight the connection to community that is possible when students are able to walk, bike or roll to school regularly.

> 📢 **TIP: COMMUNICATIONS** Pre-event communication with the schools enabled students from the high school to act as mentors for the elementary students attending the event, providing for additional volunteers to help guide students through the various activity and information sessions. City staff also used the event to engage directly with parents picking up their children from school, surveying them on why they drive their children to school, and offering information on the benefits of active school travel.

SHARED STREETS

- **Description:** Shared street projects seek to reduce motor vehicle traffic while making the street more comfortable for people walking, cycling, and rolling. Shared streets limit motor vehicle access to residents (no through access) and essential motor vehicles, such as emergency vehicles and deliveries. Street space can then be shared by all modes, prioritizing no specific road user, and the limited motor vehicle access results in slower moving vehicles and reduced volumes. The closure can occur annually, monthly, or daily.

- **When to Try This:** Typically considered most appropriate on local streets, ideally with already low motor vehicle volumes and speeds as well as limited motor vehicle through travel.

- **What to Use and Consider:**

  » Signage – Required

    › Local Access Only signs should be attached to barrier features or existing sign poles at the start/end of the project extent and at all intersecting streets.

    › The end of the project extent should be signed so users know where conditions end.

    › Turn Control, Lane Designation, and/or Detour signs may be required to direct traffic in advance of the shared street.

    › Custom signage with project information and temporary wayfinding can be added.

  » Barrier Features – Required

    › Heavy barrier features should be placed at the start of the closure and at intersecting streets. Barrier features may not be required at minor intersections if traffic volumes are already low.

    › The number of barrier features will depend on the width of the street.

    › Barrier features should be placed to in the centre of the street to leave space (3.5 metres on either side of the barrier).

  » Pavement Markings - Not Required

  » Programing, landscaping elements, beautification – Optional

- **What to Do:**

    › Information about the project should be communicated to all stakeholders.

    › Consider the access impacts on all road users.

    › Detours may need to be provided for motor vehicles, while access for residents and essential vehicles should be maintained.

    › Inspection should occur (depending on length of time the project will be on the ground) to ensure that temporary traffic control devices have not shifted.

EXAMPLE PROJECT:

LOCATION:
City of Winnipeg

PROJECT TYPE:
Open Streets

TIMELINE:
Occurs every Sunday and holiday from May long weekend until Thanksgiving, from 8 am until 8 pm.

- Vehicles are limited to one block of travel along these corridors during these times.

- Project was undertaken in the early 1990's with the intent of providing safe, car free corridors for cyclists and pedestrians. Many of the corridors were linked by bridges on either side of a river, creating a popular loop for exercising.

- Prior to 2018, metal traffic control barriers were placed along the corridor, indicating that vehicles were only permitted to travel one block. In 2018, legislation was passed that gave Winnipeg police authority to issue summons to those that travelled further than one block along the corridor. Further signage was installed at all side street intersections indicating the travel restrictions.

- During the spring of 2020, in response to the COVID-19 pandemic, the City expanded this treatment to be permanent until the beginning of July 2020 and extended the street closures to include seven new corridors.

📢 **TIP: LIGHT, CHEAP, AND EFFECTIVE** This type of project is a fairly low-cost, only requiring a one-time placement of permanent signage, and traffic control barriers to be placed by City staff at the start and end of the closure dates. Residents on or near the corridors have embraced the closures and indicate that these corridors improve the livability and community connection in these neighbourhoods.

POP-UP BICYCLE LANES

- **Description:** Demonstration or interim separated bicycle lanes created using a wide variety of materials, from soup cans to pylons to planters. Pop-up bicycle lanes are installed by removing on-street parking or closing a motor vehicle lane. They have become a popular way to trial proposed infrastructure, measure comfort levels with different designs, and engage with and build support from the community. Other programming can take place concurrently, including demonstration of various styles of bikes, street art, pop-up plazas, and streetscape improvements.

- **When to Try This:** Can be implemented in various contexts, including arterial and collector streets. This type of project is most appropriate along streets with limited intersections and access requirements, such as driveways, parking lot accesses, and loading zones. However, with proper planning, signage, and communication, these lanes can be installed along most corridors, even those with potential conflict points. If there is a plan to locate a new cycling facility along a corridor, this is an excellent method of identifying potential changes and enhancements to the design.

- **What to Use and Consider:**

  » Signage - Required

    › Lane designation signs (Bicycle Route sign or Reserved Bicycle Lane sign) that identify vehicle and cycling lanes should be installed at all entry points and intersections.

    › Lane Closure Taper sign (TC-6) should be placed at the beginning of the bicycle lane.

    › Temporary Lane Closed Ahead sign (TC-5) may be installed in advance of the closure but is not necessary for a full-time parking lane.

    › Temporary no parking signs may be added.

    › RB-37 (Right turning vehicles yield to cyclists) should be installed at the beginning of every intersection to reduce potential turning conflicts.

    › The end of the project extent should be signed so users know where conditions end.

    › Custom signage with project information and temporary wayfinding can be added.

» Barrier Features – Recommended

› Barriers should be placed between motor vehicles and cyclists to provide physical separation every 3 to 6 metres to delineate the space. Heavier and fixed barriers should be installed on roadways with higher motor vehicle speeds. If the project is along a street with driveway and alleyway access, barrier features should be placed to allow motor vehicles access.

› Barrier features should place so the bicycle lane has a clear width of minimum 1.8 meters in width. The width of the bicycle lane will be determined by the width of the existing on-street parking/motor vehicle travel lane.

› Flexible drums or other similar devices should be used at the beginning of the lane to reinforce the closure. Flexible drums should be spaced to allow access for people cycling.

» Pavement Markings – Required

› Can be functional (striping to indicate a buffer zone, bicycle lane symbols, stop lines, bike boxes, lane widths) or decorative (artwork by local organizations, chalk work by local students)

» Programming, landscaping elements, beautification – Optional

- **What to Do:**

› Information about the project should be communicated to all stakeholders in advance of implementation. Consider the access impacts on all road users.

› Large scale tactical urbanism projects such as these can require a large amount of materials and personnel, and as such require plenty of advance planning and coordination.

› Projects can transition from demonstration to interim or permanent by changing the types of materials used.

› Depending on the length of the project, regular inspection may be required to ensure that barriers remain in the locations that they were originally installed, and that road markings are either maintained or removed.

EXAMPLE PROJECT:

LOCATION:
City of Winnipeg

PROJECT TYPE:
Pop-up Protected Bicycle Lanes

TIMELINE:
Demonstration (one-day event) in June 2017

- This project was part of the community engagement process for the neighbourhood study and the design of cycling facilities along two corridors in downtown Winnipeg. It was a one-day event at two different locations along the corridor on consecutive days.

- Temporary road markings and barriers were installed using a combination of tar paper, spray chalk, pylons, and planters.

- Local schools, business organizations, advocacy groups, and residents were invited to try the temporary lanes and provide feedback on specific design elements, including intersection treatments, lane widths, parking impacts, and comfort levels for students.

- Students at the local high school along the corridor were provided an opportunity to try adaptive bicycles that had been secured for the event. These proved to be extremely popular and helped to build excitement for the possibility of new protected cycling facilities that were ultimately installed in the summer of 2018.

Photo credit:
City of North Vancouver

VARIATIONS AND ADD-ONS

PEDESTRIAN LANES

Additional space for pedestrians can be accommodated by the reallocation of parking or curbside motor vehicle lanes. This type of project is typically done in urban areas where there is an existing sidewalk that may be too narrow or if additional space is being allocated to patio space and seating. The width of the pedestrian lane is determined by the width of existing on-street parking/motor vehicle travel lane. The pedestrian lane can be delineated by various materials depending on the length of time the project will be in place. The example above shows a wooden boardwalk extension. Slip resistant material was added after the photo was taken.

FLOATING BUS STOPS

Additional space for transit riders can be accommodated by the reallocation of the curb-side lane. Seating can be provided, and paint and planters can help make the space more inviting and welcoming. Floating bus stops can be constructed out of a variety of materials, including simple wooden designs, plastic, rubber, and metal. This example from Halifax was installed on one of their frequent transit corridors. It meant that buses could stop in the lane rather than having to pull up to the curb and merge back into the travel lane. The stop is also located along a busy commercial area with high pedestrian activity, this treatment provided more space for waiting. Lastly, it was used as an opportunity to create an interesting and unique space.

CURB EXTENSIONS

- **Description:** Curb extension projects typically involve installing posts (or other objects) at an intersection or mid-block pedestrian crossing. The intent of these changes is to shorten the crossing distance for pedestrians, change the geometry of an intersection to slow the turning speed of vehicles, physically narrow the roadway to reduce vehicle speed, and beautify the streetscape. This type of intervention can occur as a standalone project, or as part of active school travel events, community activation and placemaking, or improvements to commercial and residential areas. This can occur on a demonstration or interim timeline.

- **When to Try This:** Can be implemented in a variety of contexts including collector, and local streets. Application is most appropriate at locations with identified safety issues (sightlines and crossing distance) and high levels of existing or latent pedestrian activity.

- **What to Use and Consider:**

  » Signage (required):

    › Change to roadway signage should be located on the roadway prior to the project location to indicate a change to the intersection or crosswalk.

    › Crosswalk ahead signs may be used to remind motorists of the presence of the crosswalk (if applicable).

    › Custom informational signage may be used.

  » Barrier Features (required)

    › Multiple barriers should be employed at a spacing of no less than 2 metres to allow for accessibility.

    › Barriers could include flex posts, hay bales, traffic cones, planters, tires, or other objects that denote the space.

  » Pavement Markings (required)

    › Depending on the design of the curb extension, these could include markings to denote the perimeter of the curb extension, markings to indicate the pedestrian corridor, and paint within the extension itself.

  » Programming, landscaping elements, beautification (optional)

    › Can include paint and planters etc.

- **What to Do:**

    › Information about the project should be communicated to all stakeholders.

    › Inspection should occur regularly to ensure that the temporary traffic control devices remain in place and are repaired/replaced as needed.

EXAMPLE PROJECT:

LOCATION:
City of North Vancouver

PROJECT TYPE:
Curb extensions were installed
near Larson Elementary School in 2017

TIMELINE:
Interim

- This project intended to reduce crossing distance and improve sightlines and visibility of pedestrians crossing at this intersection.

- The City worked with an artist to create the mural design and students from Larson Elementary school painted the stenciled mural themselves.

- This project used delineator posts and paint. In the future this may be transitioned to more permanent materials such as a concrete corner curb bulge.

TIP: INVOLVE THE STUDENTS! Ongoing communication and was important to get the school administration onboard and to ensure the students were engaged with the project. "Involving the students in painting the mural was a great way to build support for/awareness of the project. Be sure to use a non-slip paint. Collaboration is key - the transportation planning group (with our expertise of school travel planning) teamed up with staff from engineering (design expertise) and our public space group, who had connections to a local artist to design the mural and lead the painting project."– Natalie Corbo, Sustainable Transportation Coordinator, Planning & Development, City of North Vancouver

CROSSWALK ENHANCEMENTS

- **Description:** Crosswalk projects involve modifying an existing crosswalk with the intent of improving visibility, reducing vehicle speed, and improving accessibility for those with limited mobility. This can include painting the crosswalk in bright colors, raising the height of the crosswalk, or improving signage. These types of projects can be used as part of community engagement, neighbourhood study and design projects, active school travel programming, corridor improvement studies, or road safety programs. The timeline on these projects can be temporary, interim, or permanent.

  Note: It is important to note that decorative crosswalks can impact the visibility of the crosswalk and present a significant visual recognition issue. It is important to consider these impacts before moving forward with this or any type of project that may have a similar impact.

- **When to Implement:** Can be used in a variety of contexts including major, collector, and local streets. Application is most appropriate at locations with identified issues, community prominence, and high levels of existing or latent pedestrian crossing activity.

- **What to Use and Consider:**

  » Signage (required)

    › Crosswalk improvements ahead signage to alert vehicle drivers to changes to the pedestrian crosswalk.

    › Road Closed and Entry Prohibited signs should be affixed to barricades if the crosswalk is being painted or under construction.

- » Barrier Features (required)

  › Barriers should be employed to prohibit vehicle crossings when the crosswalk improvements are being implemented.

  › Light or heavy barricades could be employed to provide protection for project team staff.

- » Pavement Markings (required)

  › Paint to improve the visibility of the crosswalk, improve existing markings.

- » Programming, landscaping elements, beautification (required)

  › Crosswalk improvements provide an excellent opportunity to engage with the broader community, improve the streetscape, and increase community connection and vibrancy by working with residents on this project. These types of projects are highly visible and provide an excellent opportunity for community conversation and input.

- **What to Do:**
  - » Information about the project should be communicated to all stakeholders in advance of implementation.
  - » Seek to involve local residents as much as possible.
  - » Depending on the intended length of the project, regular inspection and maintenance should occur to ensure that the crosswalk improvements remain visible, functional, and are serving their intended purpose.

TIP: PREPARE FOR PUSHBACK While there were some supportive comments on social media, there were also those opposed to using tax dollars for beautification projects. Be prepared for potential pushback from those opposed to these types of projects and be clear in your messaging around the benefits offered by these types of projects, including a focus on road safety, health, and children's mobility.

EXAMPLE PROJECT:

LOCATION:
Township of Langley – crosswalk outside of
Gordon Greenwood Elementary School

PROJECT TYPE:
Decorative Crosswalk

TIMELINE:
Interim

- Installed in the fall of 2019, this project saw Township of Langley road operations crews add color and graphics to an existing crosswalk outside of a school.

- The purpose of this project was to have some fun with the crosswalk, promote more respect for crosswalk users, and add a little brightness to everyone's day. The project was a way to be creative while also adhering to engineering guidelines.

- Students and teachers were very positive, and the project was very well received.

- Expected to last 5-10 years since MMA (Methyl Methacralate) was used as the product.

PLACEMAKING AND BEAUTIFICATION

Placemaking and beautification projects include those that are designed to provide more places and spaces for people to gather such as parklets, patios, and plazas. This includes projects that utilize paint, art, and other activation elements that enhance aesthetic appeal and encourage people to use the space. Placemaking and beautification projects can make for powerful and impactful initiatives that can result in the permanent redefinition or repurposing of public space. Beautification projects can often be relatively simple and low cost to implement and can generate public support for even more similar types of public infrastructure in the future.

The following projects have been highlighted in this guide, including:

- Patios

- Parklets

- Laneways

- Sidewalk and pathway decoration

- Programming and activation

COVID-19 CONSIDERATIONS When considering projects that may encourage people to gather and share spaces, furniture, and other materials it is important to consider how concerns about COVID-19 can be mitigated. The City of Vancouver for example has installed signage still encouraging users to use and enjoy public spaces but to stay apart.

PATIOS

Additional space for restaurant and business patios can be created by temporarily reallocating on-street parking or traffic lanes, parking lots, plazas, and building frontage space. Patios can be achieved through the installation of common items such as chairs, planters, umbrellas, and tables. These types of projects have proven extremely popular in cities across North America and Europe, as they offer potential increases in seating for nearby food establishments, new community amenities for nearby residents and businesses, and public gathering space in often dense areas. Business owners can work with municipalities to establish locations where additional patio space may be appropriate. Patio projects are best situated in areas with high levels of commercial and pedestrian activity and where there is a demand for additional seating. The example below is from the City of North Vancouver, where existing sidewalk space was used to pilot additional patio space. The sidewalk/pedestrian lane was extended into the existing parking lane.

PARKLETS

Parklets can take on several different forms, but usually involve creating a space for seating within an existing public space typically used for parking vehicles. Whereas patios are associated with specific businesses, parklets are intended to be open public spaces for multiple uses. Seating can be provided using materials such as crates, furniture, fencing, and wooden pallets, while green space can be created using artificial turf, planters, and sod. You will also want to ensure that these parklets are signed to invite users to use them, highly visible from the roadway to avoid potential collisions, and that local business and residents are aware of the installation in advance. Parklet projects are best suited for locations with existing high levels of pedestrian activity, such as in a commercial area or near public facilities like a library. These types of projects can help communities and business groups re-imagine what public space (that is typically used for the storage of private vehicles) could be used for. Providing a comfortable green space for people to sit and linger in an urban area encourages users to shop and eat at nearby businesses, and can lead to the permanent installation of small parks or parklets in these areas, improving the public realm.

Photo credit:
City of Edmonton

LANEWAYS

Laneway projects seek to beautify and repurpose typically neglected back lanes and alleys. This is usually achieved by painting the road surface and surrounding buildings in bright colors, installing interactive elements such as street furniture, games such as basketball and four square, and programming events such food trucks and movies. These projects are also best suited in locations with existing high levels of pedestrian activity, and should be made highly visible through the use of signage on the adjoining streets. Additional lighting may also need to be considered. Communication of the project and accompanying programming is also important, as this will not be a typical or expected space for people to gather. Undertaking these kinds of laneway projects can help communities recognize the potential of these spaces, bring foot traffic to underused areas, and potentially create a new public space (for little cost) in an areas many have never considered for that purpose.

SIDEWALK AND PATHWAY DECORATING (CONNECTING TO SCHOOLS)

A fun and engaging way to encourage active school travel is to decorate sidewalks and pathways along usual routes to school with interactive artwork using paint or chalk. This can include painting dots for users to jump to and from, hopscotch, animal games, or using students' feet as templates to paint footsteps to follow (as shown below). Street murals and decoration can also be considered, this would require a temporary street closure for motor vehicles which has additional logistic considerations. These types of projects are typically done in areas with existing sidewalks and paths used by students on their way to and from school where the school is seeking to increase rates of active school travel. They can serve as a way to engage with schools and the surrounding community and provide an incentive for families to walk to and from school.

PROGRAMMING AND ACTIVATION

Tactical urbanism projects are most successful when there is a good number of people in attendance to enjoy the newly created spaces, provide feedback, and engage with the project team on their perceptions of the project. This is best achieved by creating a reason for people to attend your event through effective programming and activation. Programming can involve any number of initiatives but can seek to provide a reason for people to attend your event and visit a space, thereby activating the space. This could include having food trucks nearby, setting up games, musical instruments, chalk, engagement stations etc. It will be important to have a communication plan in place to inform people of what programming will be offered. If you are able to incentivize enough people to attend your event through solid programming, you will have successfully activated your space, achieving a key goal of tactical urbanism – using real world experiences of people to inform the future design of public space.

APPENDIX C:
BENEFITS OF ACTIVE
SCHOOL TRAVEL

ACTIVE KIDS ARE HEALTHY KIDS

Choose active travel to and from school.

Introduce active travel into your routine. Even one day per week can help.

WALK, BIKE, AND ROLL

Get your kids to walk, bike, skateboard, or take public transit to and from school. They'll get some fresh air, exercise, and a feeling of independence.

DRIVE TO 5

Try parking just a few blocks away (5 minutes) and walk with your kids. You'll free up space in the school zone, get some fresh air, and have a chance to hear about your child's day.

WALKING SCHOOL BUS

Organize your own Walking School Bus program which allows children to walk to school together accompanied by adult volunteers.

THE CANADIAN 24 HOUR MOVEMENT GUIDELINES

recommends for ages 5 – 17

SWEAT	STEP	SLEEP	SIT/ SCREEN
60 minutes daily	1 – 2 hours daily	9 – 11 hours daily	less than 2 hours daily

Find out more: csepguidelines.ca

⊘ BIG BENEFITS

❤ HEALTH

- Good for Heart & Bones
- Increased Alertness & Attention
- Improved School Performance
- Better Sleep
- Less Anxiety & Depression

🏠 COMMUNITY

- Fostered Friendships
- Increased Sense of Belonging
- Better Understanding of the Local Area

🛡 SAFETY

- Reduced Traffic Volume Around Schools
- Lower Risk of Collision & Injury

〰 AIR QUALITY

- Reduced Vehicle Emissions
- Improved Air Quality
- Lower Risk of Lung & Cardiovascular Diseases

CROSS SMART

- Always cross at designated crosswalks and follow pedestrian signs and traffic signals.
- Watch for drivers turning left or right through the crosswalk.

For more tips and resources visit the schools tab at: translink.ca/travelsmart

Supported by:

Vancouver CoastalHealth   fraserhealth   ICBC   BCAA   TRANSLINK