SANDAG

CHAPTER 4B
QUICK-BUILD IMPLEMENENTATION STRATEGY

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4B.0 Introduction

The Implementation Roadmap is a practical guide for San Diego-region jurisdictions, transit agencies, and partner organizations seeking to deliver quick-build improvements that enhance safety, accessibility, reliability, and the overall transit user experience.

This chapter reflects on lessons learned through extensive technical analysis, partner engagement, and fieldwork across San Diego County. Its goal is to provide tailored guidance for identifying, designing, funding, and implementing quick-build transit treatments within a 12- to 18-month timeframe. It also offers corridor-specific recommendations for the two corridors selected for conceptual design.

Quick-build projects provide an opportunity to address urgent transit needs while laying the foundation for more permanent capital investments. To be successful, quick-build projects must be:

- Responsive to local conditions, rather than relying on generic checklists
- Informed by partners and community needs
- Feasible within local right-of-way (ROW), permitting, and funding constraints

The primary audiences for this chapter are:

- City and county staff responsible for streets, traffic engineering, capital improvements, or active transportation
- Transit operators, particularly those managing service planning and operations
- Community-based organizations (CBOs) advocating for safer, more accessible transit service
- Regional and state agency staff supporting transportation planning, design, or permitting

While grounded in a regional framework, this guide emphasizes real-world lessons from San Diego's built environment and institutional context. Best practices from local projects, such as the El Cajon Boulevard Busway, input from jurisdictional partners, and feedback from outreach to CBOs, working groups, and over a dozen advisory meetings shaped this guide.

The document is designed to help organizations make informed decisions, avoid common pitfalls, and leverage quick-build projects as both immediate and long-term transit strategies.

This chapter is organized into four sections:

4B.1 San Diego Region Quick-Build Context

- Highlights San Diego's unique challenges and opportunities for quick-build transit improvements.
- Shows how data, past pilots, and equity priorities shape regional approaches.
- Explains why flexible, low-cost projects with community feedback are essential despite implementation hurdles.

4B.2 Partner and Community Feedback Themes

- Summarizes key lessons from extensive outreach with riders, planners, CBOs, and officials.
- Highlights community priorities of safety, comfort, visible results, and locally tailored design.
- Discusses implementation realities of ROW limits, coordination, maintenance, and the value of pilots in building long-term support.

4B.3 Implementation Roadmap

- Outlines the steps involved in the quick-build project process, from project identification to implementation

4B.4 Turning Quick-Builds into Permanent Solutions

- Defines how to measure quick-build success by using ridership, safety, performance, and community feedback.
- Outlines steps for future projects

4B.1 San Diego Region Quick-Build Context

San Diego's diverse geography, jurisdictional fragmentation, and corridor-specific challenges create a unique landscape for quick-build transit improvements. While the quick-build model is used nationally, San Diego's approach is shaped by regional mobility priorities, agency partnerships, and community-led expectations. For more information on the existing conditions of the San Diego region with regards to this project, see Chapter 1.

Key Features

- Regional fragmentation: 18 cities, the County of San Diego, two transit agencies, and multiple special districts require cross agency coordination.
- Corridor variation: Needs along Broadway in Downtown San Diego differ sharply from Northern Oceanside or Logan Heights, requiring flexible but localized treatments.
- Strong planning and data foundation: Resources from the Vision Zero Dashboard, automatic passenger counting, and community planning documents provide a framework to identify and evaluate quick-build opportunities.
- Track record of low-cost innovation: Previous projects, such as the El Cajon Boulevard Busway and Park Boulevard bus lanes demonstrate, regional interest in iterative, data-informed pilots.
- Equity and access focus: Quick-builds are most needed in communities with limited car access, substandard infrastructure, and historic underinvestment—such as San Ysidro, City Heights, Vista, and Southeast San Diego.

Quick-build projects are particularly valuable because they allow for community feedback after implementation, not just during design, through reversible, low-cost infrastructure that can test various roadway treatments with minimal risk and significant potential reward. Regional implementation challenges—limited rights-of-way, cross jurisdictional planning needs, and skepticism about temporary materials—have informed the structure and recommendations of this roadmap.

4B.2 Partner and Community Feedback Themes

This project gathered extensive input from transit riders, local planners, engineers, CBOs, and elected officials. Across dozens of meetings and workshops, several themes emerged that now shape the approach to quick-build implementation in the San Diego region. For more information on outreach methods and strategies for communicating quick-build projects, see Chapter 2.

- Safety is paramount: Riders consistently highlighted lighting, sidewalk quality, and pedestrian crossings as urgent needs.
- Shelter and seating matter: The lack of dignified, shaded waiting areas discourages transit use, particularly among elders and parents.
- People want real change: There is fatigue over planning processes that don't result in visible action. Quick-builds must demonstrate early impact.
- Designs should reflect local identity: The Encanto/Valencia Park community-designed shelter serves as a positive model for art and place-based infrastructure.
- ROW is always a constraint: Nearly every jurisdiction noted challenges about fitting quick-builds into constrained street cross-sections.
- Transit priority must be tailored: Some cities prefer less visible interventions, such as signal timing, transit signal priority, or queue jumps rather than dedicated bus lanes.
- Permitting and coordination take time: Early buy-in from traffic operations, emergency services, and public works is essential.
- Don't ignore maintenance: Modular infrastructure must be durable, easy to clean, and ADA-compliant, with clear maintenance plans.
- Support builds over time: Pilot projects can shift perceptions. Even initially controversial treatments, like the El Cajon Boulevard's bus lane, gained support through strong messaging and iterative design.

These lessons guide the rest of this roadmap, ensuring that implementation strategies reflect what has worked, what has not, and what matters most to the people using and operating San Diego's transit system.

4B.3 Implementation Roadmap

The main body of the memo is the project Implementation Roadmap, which outlines the steps involved in the quick-build project process, from project identification to implementation. While many of these steps can occur concurrently, the guide follows the general sequence most projects take.

Project Initiation and Screening

Quick-build treatments in the San Diego region are typically initiated through three primary pathways.

1. Addressing Operational Needs

When delays, on-time performance issues, or safety concerns are identified, through data or operator feedback, transit agencies may take the lead on project planning and delivery within their scope, such as identifying priority stop locations or deploying schedule changes. Since they do not own or control the ROW, close partnership with the local jurisdiction is essential.

2. Jurisdiction-Led Corridor Improvements

Local jurisdictions may lead quick-build efforts when they identify roadways with multimodal conflicts, high transit use, or safety concerns requiring immediate action. In these cases, the city or county serve as the lead agency and coordinate with transit operators to ensure changes align with bus service goals.

3. Pilot for Future Capital Projects

SANDAG may initiate quick-build projects to test roadway configurations and treatments ahead of larger Rapid or capital projects. In these cases, SANDAG leads planning and outreach, while coordinating with the local jurisdiction for permitting and installation, and with transit operators for operational feedback. This approach helps de-risk future investments and validate treatments in real-world settings.

Each of these pathways affects roles and responsibilities and should be considered when identifying the appropriate project lead. In all cases, collaboration amount SANDAG, transit operator, and the jurisdiction is critical for success.

Additional screening steps include:

- Using the scoring framework (developed in Chapter 1) to evaluate feasibility, equity, and readiness.
- Prioritizing overlapping efforts, such as corridors undergoing resurfacing, utility or water and sewer projects, or transit station upgrades.

Project Lead and Roles

Early alignment on lead roles improves coordination, accelerates permitting, and ensures long-term maintenance responsibilities are clear.

- The street-owning jurisdiction typically serves as the implementation lead.
- SANDAG may take the lead with regionally significant corridors or Rapid route pilots.
- Transit agencies lead when addressing immediate service reliability issues and serve as critical technical partners in all cases.
- Support roles include CBOs, public works and engineering staff, communications teams, emergency services, and project consultants.
- For projects spanning multiple jurisdictions, quick-build implementation is typically challenging within the required timelines. As such, between case studies and local examples, the vast majority of projects identified did not cross jurisdictional boundaries.

Broadway Quick-Build Pilot

In this study, the opportunity for quick-build transit improvements along the Broadway Corridor was identified using the scoring framework. However, as a regionally significant corridor, this project could have been initiated through any of the three pathways.

The corridor presents a unique opportunity to improve bus travel times and reliability due to the high volume of buses that use the corridor and the lengthy time it currently takes for buses to traverse the 1.1 miles of Broadway included in this study. Multimodal conflicts, particularly bike-bus interactions, create safety concerns that warrant attention from the City of San Diego.

SANDAG has recently been evaluating long-term improvements for the corridor through its Urban Core and Connection initiative, making this corridor ideal to use a quick-build treatment as a near-term pilot for the longer-termed planned improvements.

As the agency responsible for permitting, roadway maintenance, local streets and road funds, and ownership of the ROW, the city is best position to lead this project. MTS will coordinate transit service changes during construction and provide feedback and performance data to evaluate the pilot.

Oceanside Quick-Build Pilot

The opportunity for quick-build transit improvements in this corridor was identified through the scoring framework. The corridor had also been highlighted for improvements in the NCTD BREEZE Speed and Reliability study. Given high passenger volumes, multi-modal conflicts, and potential to improve bus travel times, this corridor is a priority for the City of Oceanside and NCTD.

As the jurisdiction responsible for permitting, roadway maintenance, local streets and roads funding, and ROW ownership, the city is best positioned to lead implementation of the proposed project. NCTD will be coordinate transit service changes during construction and provide feedback and performance data to evaluate the pilot.

Maintenance Responsibilities

One of the most frequently cited challenges during partner discussions has been the long-term maintenance of new roadway elements, particularly those outside the typical scope of a city's street maintenance program. This is especially true for treatments such as temporary bus islands, which require ongoing upkeep to remain safe, ADA-compliant, and functional.

Best practice research suggests that the most practical model is for cities to assume maintenance responsibilities, since they already manage the surrounding roadway and sidewalk environments. However, many jurisdictions have expressed reluctance to formally accept responsibility for newer or less familiar elements without further discussion. MTS and NCTD have clarified that while they maintain standard amenities such as shelters and signage, they are not equipped to maintain non-standard infrastructure.

To address this hurdle, the implementation guidelines emphasize:

- Early agreements: Cities, SANDAG, and transit operators should negotiate maintenance responsibilities during project scoping to avoid confusion at installation.
- Funding support: Where possible, SANDAG or external grants could fund maintenance during the pilot period, with clear agreements on long-term handoff.
- Public reporting tools: Apps, hotlines, or other channels allow the public to report issues so that maintenance needs are addressed quickly.
- Modular flexibility: Using modular, replaceable parts makes maintenance more manageable and reduces costs.

These considerations are intended to provide an initial framework to resolve the questions of ownership that often slows implementation.

Feasibility Assessment

Evaluating the feasibility of a project location is a critical early step in quick-build implementation, to ensures time and resources are directed towards viable opportunities. A well-structured feasibility assessment helps avoid advancing projects that may face major legal, technical, financial, community, or political obstacles.

Table 4B.1: Quick-Build Feasibility Assessment Table

Feasibility Type	Assessment Criteria
Technical Feasibility	• Is there ROW available without requiring parking removal or major street redesign? • Are existing curbside uses (e.g., parking, loading zones) compatible with possible changes? • Are low-cost materials sufficient for the proposed intervention?
Legal and Regulatory Feasibility	• Supported by existing city or regional plans and policies? • Legal authority to implement changes (ROW ownership)? • Jurisdictional readiness to issue permits or resolutions?
Organizational Feasibility	• Is the city willing to lead or co-lead implementation • Past support for similar transit projects? • Local staff capacity and alignment with agency goals?
Community Acceptance	• Strong community support or past pushback? • Is the corridor in a transit-dependent or underserved community? • Are community member partners already engaged or over-engaged from other projects? • Recent public meetings or controversy on corridor?
Economic Feasibility	• Funding available? • Opportunity to bundle with scheduled street/utility work?

Funding

Quick-build projects often face a funding gap because their relatively low costs can fall below minimum thresholds for many state and federal capital programs. Agencies should begin by exploring internal and local funds—such as roadway maintenance budgets—before pursuing external grants. This includes identifying opportunities to bundle quick-build elements with other roadway maintenance or utility projects planned for the identified corridor. Bundling can make the incremental cost of adding these treatments minimal, since they take advantage of mobilization, permitting, and construction already underway.

Where outside funding is needed, the following programs may apply:

- Active Transportation Program – Quick-Build Pilot: Explicitly designed to support tactical, near-term improvements. Competitive statewide and often favors bundled projects that demonstrate measurable safety or active transportation benefits.
- Clean California Local Grant Program (Caltrans): Appropriate for bus stop amenities, beautification, lighting, or pedestrian safety features. Less suitable for bus-only lanes or operations-focused elements.
- Transit and Intercity Rail Capital Program (CalSTA): Typically funds large, multi-year capital projects. Quick-builds may be included if they are packaged as part of a broader Rapid corridor or major transit capital investment.
- Local Roadway Safety Plan Implementation (Caltrans): Can fund specific safety-related quick-build elements (crosswalks, lighting, curb extensions) that align with an adopted Local Roadway Safety Plan.

- SANDAG Smart Growth Incentive Program: Flexible local program that could fund small or bundled quick-build elements, but awards are usually larger in scope—projects may need to be combined for eligibility.

When seeking external funding, quick-builds are most competitive when bundled into corridor packages or tied to safety and equity outcomes. Stand-alone quick-builds are often too small to meet minimum award amounts but can be advanced if paired with active transportation or safety elements that align with program goals.

Effective Use of Capital Funds: City of Hayward Simme Seat Pilot Program

For its **Simme Seat Pilot Program**, the City of Hayward was able to allocate $60,000 from its 2025-2034 Capital Improvement Program. This pilot program has successfully installed 12 Simme Seats in locations that were missing seating accommodations and will pilot alternative seating for two years.

Source: City of Hayward, ***https://hayward-ca.gov/simme-seat***

Design Phase

Selecting Quick-Build Treatments

To identify context-appropriate treatments, agencies can use the Quick-Build Matrix (Chapter 3) and the treatment profiles in Appendix 3A. These resources include a wide range of options, their benefits, drawbacks, and cost estimates. Treatment selection should reflect:

- Local context: ROW availability, existing infrastructure, curb activity
- Feasibility: Material cost, staff capacity, lead time for procurement, funding availability
- Long term vision/plans for the corridor
- Partner comfort level: Some agencies may be more willing to try temporary bus lanes, others may prefer signal optimization or queue jumps
- Community priorities: Responses to previous plans, safety concerns, or perceived needs
- Minimizing disruption to general traffic operations

Design Plans

Depending on the scope and corridor conditions, several technical documents may be required during the design phase of a quick-build project. Common design plans include:

- Striping and Signage Plans: Illustrate changes to lane markings, crosswalks, and signage.
- Curb Management maps: Identify adjustments to curb uses such as loading, parking, or passenger pick-up/drop-off.
- Traffic Control Plan for During Constructions: Outline construction staging, detours, and safety measures during installation.
- Street Design Manual: Ensure consistency with adopted design standards and treatment specifications.
- Preliminary cost estimates for materials and labor: Provide planning-level estimates for materials, labor, and contingencies.

Design development should be a collaborative process that involves coordination with key city departments to ensure feasibility, safety, and regulatory compliance. Agencies should engage the following departments early and often:

- Public works: For maintenance, materials, and implementation logistics.
- Engineering: For design review and technical specifications.
- Transportation and Traffic Ops: For traffic flow, signal timing, and MUTCD compliance.
- Risk Management: To review liability and safety considerations.
- Planning: For consistency with citywide initiatives, alignment with General Plan/Climate Action Plan/Mobility Master Plan/Community Plans

Development Services and Planning: Particularly, when permitting or consistency with community plans or zoning is required. This cross-departmental coordination laid the groundwork for engaging key partners and the public. Once draft design plans are in place, this broader engagement is essential to refine project details, incorporate community feedback, and build support for successful implementation.

Project Implementation

With project objectives defined and feasibility confirmed, the next step is to develop a design and implementation plan tailored to the corridor's conditions, community context, and delivery timeline.

Identify Project Opportunities for Streamlining

Quick-builds often face hurdles with permits, approvals, and compliance, but these same processes can also open doors for streamlining and innovation. This section focuses on leveraging opportunities to make implementation smoother and more impactful.

Expedited Permitting Pathways

The City of San Diego has expedited permit review programs (e.g., **Sustainable Building Expediate** and **Express Plan Check**) that can apply to transportation quick-builds when framed around safety, equity, or climate goals. Positioning a project under Vision Zero or Complete Communities can help unlock faster review and implementation.

CEQA Categorical Exemptions

Most quick-builds fall under Class 1 or Class 4 exemptions. The lesson is: don't overcomplicate environmental review, know which exemption applies and file a Notice of Exemption early to avoid delays.

Traffic Control Device Flexibility

MUTCD standards can be strict, but San Diego has successfully used Caltrans experimentation approvals (e.g., green bike lanes, interim transit lanes). Treat pilot status as an opportunity: implement, collect data, then iterate.

Equity and Title VI Compliance as a Strength

Instead of treating Title VI/Environmental Justice review as a hurdle, build it in as a value-add. Equity assessments and multilingual outreach not only satisfy requirements, they also strengthen community trust and buy-in for future permanent projects

Permits as Early Coordination Tools

Permitting processes are an opportunity to align departments and agencies early, including traffic engineering, public works, fire, and accessibility coordinators. Using permitting as a coordination step avoids costly redesigns and builds a foundation for smoother implementation.

Conclusion: During this step, organizations must consider all the hurdles that may be present when deploying a quick-build. Mitigating these challenges early on will be essential for successfully implementing a successful quick-build

Incremental Implementation

Quick-build projects are especially effective when they are layered onto ongoing or planned city projects. Many jurisdictions already undertake routine maintenance and resurfacing activities, such as slurry seals, restriping, and curb repairs, that create natural opportunities to add bus priority treatments at minimal additional cost. For example, if the City of San Diego is preparing a slurry project along Broadway, simple measures like striping or thermoplastic markings can be incorporated to establish bus-only lanes in the same work window, even if other more complex elements (e.g., bus bulbs, modular boarding islands, signal modifications) are phased in later.

This incremental approach allows projects to:

- Reduce upfront costs by leveraging existing construction mobilization and staffing.
- Shorten delivery timelines by aligning with already-scheduled maintenance activities.
- Build community familiarity by phasing in changes, which can help generate support for larger-scale, permanent improvements.

This approach is also well-suited for any jurisdictions where roadway work is planned. In these cases, quick-build elements should be viewed not as stand-alone projects, but as add-ons that take advantage of work already occurring in the corridor.

Quick-Build Monitoring and Evaluation

Once a quick-build treatment is installed, monitoring should begin immediately and continue throughout the pilot period. Monitoring is not only a tool for evaluating success; it is a critical step in demonstrating accountability, building public trust, and generating the data needed to guide future action. Some temporary materials, such as modular curbs, flexible posts, or paint, can be quickly adjusted in the field, allowing agencies to test variations in design configuration as part of the pilot period. Unlike traditional capital projects, quick-builds are intentionally iterative, meant to evolve based on real-world use and feedback.

In the early weeks after installation, feedback from transit operators and riders can help identify operational issues such as unclear signage, stop relocation impacts, or unsafe merging zones. Transit operators are often the first to notice these challenges, making their input particularly valuable. Simultaneously, community members may surface unanticipated concerns around accessibility, noise, or changes in pedestrian routing.

To supplement qualitative feedback, agencies should use available data tools to track changes in performance. Automatic Passenger Counters (APCs) can be used to assess bus delay, on-time performance, and changes in ridership. Observational data, such as video footage or on-site counts, can document pedestrian behavior and safety conditions, especially at intersections or crossings.

Maintenance tracking is also essential. Agencies should log any issues with modular materials, cleanliness, or wear-and-tear. A pattern of frequent maintenance needs may indicate that a material or treatment is not appropriate for long-term use in that location.

Monitoring should also be visible and transparent. Clear signage or communication materials can help explain that the project is a pilot, describe how feedback will be used, and provide a simple method for submitting input (e.g., QR codes linked to feedback forms, phone lines, or community liaisons).

Key Performance Indicators

The most important key performance indicators to track are going to be based off the goals of the quick-build. For example, in the case of bus-priority lanes or queue jumps, it will be important to track transit performance along the corridor where these treatments are placed. Suggested key performance indicators include:

- Average travel time and schedule adherence (on-time performance)
- Changes in bus dwell times at modified stops
- Change in ridership along affected corridor segments
- Number and type of rider/operator complaints or feedback items
- Frequency and cost of maintenance interventions
- Pedestrian activity or compliance at modified crossings
- Conflicts or near-misses observed at intersections
- Changes in mode choice (e.g., observed biking or walking)
- Community perception of safety or satisfaction, via intercept surveys or online tools

Ultimately, monitoring is what distinguishes a quick-build from a static interim treatment. Agencies should approach this phase with curiosity and flexibility, open to adjusting treatments, scaling successful elements, or even removing components that do not perform as expected. By embedding monitoring into the project lifecycle, quick-builds can serve not only as immediate improvements but as the foundation for more effective, permanent change, not just justify permanence. Agencies should be transparent with communities about what's being evaluated and how results will be used.

4B.4 Turning Quick-Builds into Permanent Solutions

While quick-build projects are typically designed to be temporary, some successful examples serve as pilots for long-term improvements. Defining what success looks like from the start, and tracking progress consistently, creates a clear path toward making a project permanent.

Success should be measured based on outcomes that reflect the project's original goals. These could include:

- Measurable improvements in project metrics (i.e. delay, on-time performance, safety)
- Positive community and partner feedback
- Increased usage or ridership
- Observable safety improvements (e.g., fewer near-misses or crashes)
- Demonstrated consistency with long-term mobility or climate goals

If these criteria are met, agencies can begin exploring the transition to permanent infrastructure.

- From Pilot to Permanent: El Cajon Boulevard Busway

The El Cajon Boulevard bus-only lane (2019) began as a pilot project aimed at improving travel time and reliability for MTS *Rapid* 215 and Route 1. The success of the project hinged on its alignment with long-term transit goals, including its implementation alongside *Rapid* capital improvements on the same corridor. The project is still in place as of 2025, with broad support from the community.

According to MTS and the City of San Diego (Chapter 2), some factors which led to the successful quick-build implementation of the El Cajon Boulevard Busway were:

- Wide ROW, allowing to continued general traffic throughput and less impact on the community
- Existing high frequency transit to support project purpose
- Quick implementation and low-impact treatments, such as striping, signage, and bollards
- The metrics that helped the implementing agencies prove the continued viability of the project included
- Safety data gathering post-implementation using community and bus operator feedback
- Increased ridership on routes along the corridor
- Reduced delay and bus travel time along the corridor

Considerations for Future Projects

The planning stage of quick-build projects can support the future permanent implementation of projects by:

- Building evaluation criteria into the design and implementation plan
- Identifying capital or grant funding sources that align with long-term goals
- Documenting community feedback that supports continued investment
- Coordinating early with Planning and Development Services to flag design or permit needs