# Brookline Transportation Mode Shift Strategy Options

## Scalable Approaches from Current Vision to Regional Leadership

### Overview

This document presents four escalating strategy options for Brookline’s transportation transformation, building from the current electrification-focused vision to comprehensive regional leadership. Each strategy incorporates lessons from neighboring municipalities while considering political feasibility, resource requirements, and community impact.

**Updated to reflect Brookline’s significant progress as of 2024-2025.**

### BROOKLINE’S CURRENT FOUNDATION (2024-2025)

#### ✅ Major Accomplishments Already in Place:

* **Climate Framework**: ZEAB reconstituted with 2040 net-zero mandate and environmental justice focus
* **Policy Foundation**: Complete Streets policy adopted, fossil fuel-free building regulations implemented
* **EV Infrastructure**: Federal grant secured for curbside charging, Soule Recreation Center and Skyline Park charging stations in final deployment
* **Major Project**: Washington Street redesign approved with protected bike lanes (Fall 2027 construction)
* **Planning Process**: 2025 Climate Action and Resiliency Plan under development with extensive public engagement
* **Community Engagement**: Electrify Brookline campaign active, 600+ residents participated in CARP planning

This strong foundation means Brookline is already well into Strategy 1 implementation and has made significant progress toward Strategy 2 and 3 elements.

## IMPLEMENTATION ROLES FRAMEWORK

Each action item is assigned to one of three key implementation roles to clarify responsibility and optimize effectiveness:

### 🏛️ **TOWN STAFF** (Direct Implementation)

**Primary Role**: Execute policy, manage projects, coordinate with state/regional entities - Developing and implementing transportation infrastructure projects - Managing grant applications and funding coordination - Conducting technical studies and data collection - Coordinating with state agencies (MassDOT, MBTA) and neighboring municipalities - Operating and maintaining transportation systems - Enforcing regulations and policies

### 🧭 **ZEAB ADVISORY** (Strategic Guidance)

**Primary Role**: Provide expert advice, policy recommendations, and strategic oversight - Researching best practices and policy options - Developing policy recommendations for Select Board consideration - Reviewing and advising on transportation project priorities - Monitoring progress toward climate targets and mode shift goals - Facilitating community input on transportation planning - Advising on equity considerations and environmental justice impacts

### 📢 **COMMUNITY ADVOCACY** (Public Engagement & Pressure)

**Primary Role**: Build public support, advocate for priorities, engage in democratic processes - Organizing community support for transportation initiatives - Advocating at Town Meeting for policy adoption - Conducting public education and outreach campaigns - Engaging with elected officials on transportation priorities - Building coalitions with regional advocacy organizations - Raising awareness about transportation options and benefits

**Collaborative Actions**: Some initiatives require coordination across all three roles, marked as **ALL ROLES**.

## STRATEGY 1: ENHANCED ELECTRIFICATION (Minimal Impact)

### *Building directly on current vision with targeted improvements*

#### Core Approach

Enhance the existing electrification focus with immediate wins and regional coordination opportunities, maintaining the current scope while improving effectiveness.

#### Key Components

**From Current Vision (Maintained):** - Personal vehicle electrification with charging infrastructure - Municipal fleet electrification (police, street sweepers, grounds equipment) - Multi-unit housing charging solutions - Town-owned property charging stations

**Regional Enhancements (Added):** - **Newton Model**: Create dedicated EV Taskforce with community members - **Regional Coordination**: Join Boston/Cambridge EV charging network planning - **State Alignment**: Apply for MassEVIP and federal CFI grants identified in regional analysis - **Cambridge Lesson**: Explore shared/off-site parking solutions to address charging conflicts

#### Specific Actions

1. **Immediate (0-6 months)**:
   * ✅ **COMPLETED**: ZEAB reconstituted 2024 (serves as EV taskforce function)
   * ✅ **COMPLETED**: Federal curbside charging grant secured for 3-5 locations
   * 🏛️ **NEW**: Coordinate with Boston curbside charging deployment *(TOWN STAFF)*
   * 🏛️ **NEW**: Assess BHA properties for charging installation *(TOWN STAFF)*
2. **Short-term (6-18 months)**:
   * ✅ **IN PROGRESS**: Soule Recreation Center (energizing July 2025) and Skyline Park (August 2025)
   * ✅ **IN PROGRESS**: Curbside charging public engagement Summer 2025
   * 🏛️ **NEW**: Coordinate with MBTA for transit electrification planning *(TOWN STAFF)*
   * ✅ **IN PROGRESS**: Electrify Brookline Campaign serves as education program
   * 🧭 **NEW**: Develop EV adoption metrics and progress tracking *(ZEAB ADVISORY)*
   * 📢 **NEW**: Expand community EV education outreach *(COMMUNITY ADVOCACY)*

#### Expected Outcomes

* **Mode Shift**: Minimal (5-10% of current drivers switch to EV)
* **GHG Reduction**: 15-20% reduction in transportation emissions
* **Infrastructure**: 50-100 new charging ports across town
* **Regional Position**: Participant in regional charging network

#### Political Feasibility: **HIGH**

* Builds directly on existing consensus
* Low controversy, high community support
* Minimal disruption to current transportation patterns

#### Resource Requirements: **LOW-MODERATE**

* Staff time: 0.5-1.0 FTE for coordination
* Capital: $500K-$1M (with grants)
* Implementation period: 18 months

## STRATEGY 2: COORDINATED MODE SHIFT (Moderate Impact)

### *Adding active transportation and regional partnerships*

#### Core Approach

Expand beyond electrification to include active transportation infrastructure and regional coordination, incorporating lessons from Somerville’s quick-build methodology and Newton’s institutional approach.

#### Key Components

**Strategy 1 Foundation (Maintained):** - All enhanced electrification elements from Strategy 1

**Active Transportation Additions:** - **Somerville Model**: Quick-build protected bike lanes on priority corridors - **Dedham Approach**: Pilot lane narrowing projects with data collection - **Newton Framework**: Complete Streets policy implementation - **Regional Coordination**: Blue Bikes expansion and cross-border route connectivity

#### Specific Actions

1. **Immediate (0-6 months)**:
   * ✅ **All Strategy 1 actions** (see above status)
   * ✅ **COMPLETED**: Complete Streets policy adopted with Transportation Board implementation
   * ✅ **IN PROGRESS**: Washington Street identified as major protected bike lane corridor
   * 🏛️ **NEW**: Negotiate Blue Bikes expansion with Boston/Cambridge *(TOWN STAFF)*
   * 🧭 **NEW**: Research and recommend quick-build corridor priorities *(ZEAB ADVISORY)*
   * 📢 **NEW**: Build community support for bike infrastructure expansion *(COMMUNITY ADVOCACY)*
2. **Short-term (6-18 months)**:
   * 🏛️ **NEW**: Deploy quick-build protected bike lanes on additional corridors *(TOWN STAFF)*
   * 🏛️ **NEW**: Launch lane narrowing pilots on 2-3 streets with data collection *(TOWN STAFF)*
   * 🏛️ **NEW**: Install bike/scooter charging stations at transit stops *(TOWN STAFF)*
   * 🏛️ **NEW**: Coordinate with MBTA for Green Line connectivity improvements *(TOWN STAFF)*
   * 🧭 **NEW**: Monitor and evaluate pilot project performance *(ZEAB ADVISORY)*
   * 📢 **NEW**: Advocate for bike network funding at Town Meeting *(COMMUNITY ADVOCACY)*
3. **Medium-term (18-36 months)**:
   * ✅ **PLANNED**: Washington Street protected bike lanes (Fall 2027 construction)
   * 🏛️ **NEW**: Complete priority bike network connections to neighboring towns *(TOWN STAFF)*
   * 🏛️ **NEW**: Make permanent improvements based on pilot results *(TOWN STAFF)*
   * **ALL ROLES**: Expand micromobility options and integration
   * 🧭 **NEW**: Assess regional coordination opportunities *(ZEAB ADVISORY)*

#### Expected Outcomes

* **Mode Shift**: Moderate (15-25% increase in cycling/walking for local trips)
* **GHG Reduction**: 25-35% reduction in transportation emissions
* **Infrastructure**: Protected bike lanes on 5-8 miles of roadway
* **Regional Position**: Active participant in regional bike network

#### Political Feasibility: **MODERATE**

* Some controversy over parking/road space reallocation
* Strong support from environmental and cycling communities
* Requires careful community engagement around pilot projects

#### Resource Requirements: **MODERATE**

* Staff time: 1.5-2.0 FTE for planning and implementation
* Capital: $1.5M-$3M (including grants and quick-build materials)
* Implementation period: 36 months

## STRATEGY 3: COMPREHENSIVE TRANSPORTATION TRANSFORMATION (Substantial Impact)

### *Legislative framework with ambitious targets and equity focus*

#### Core Approach

Implement comprehensive transportation transformation with legislative framework, performance targets, and equity considerations, incorporating Cambridge’s ordinance model and Boston’s comprehensive planning approach.

#### Key Components

**Strategy 2 Foundation (Maintained):** - All enhanced electrification and active transportation elements

**Comprehensive Planning Additions:** - **Cambridge Model**: Transportation Safety Ordinance with specific targets - **Boston Approach**: Quantified mode shift goals (30% car trip reduction by 2030) - **Newton Integration**: Building-transportation nexus through zoning reforms - **Regional Leadership**: Formal partnerships and shared metrics

#### Specific Actions

1. **Immediate (0-6 months)**:
   * ✅ **All Strategy 2 actions** (see above status)
   * 🧭 **NEW**: Draft Transportation Safety Ordinance with mode shift targets *(ZEAB ADVISORY)*
   * ✅ **IN PROGRESS**: Baseline data collection through 2025 CARP process
   * ✅ **COMPLETED**: Transportation Equity Framework through ZEAB environmental justice mandate
   * 📢 **NEW**: Build coalition support for Transportation Safety Ordinance *(COMMUNITY ADVOCACY)*
2. **Short-term (6-18 months)**:
   * 📢 **NEW**: Advocate for Transportation Safety Ordinance at Town Meeting *(COMMUNITY ADVOCACY)*
   * 🏛️ **NEW**: Support ordinance with technical implementation planning *(TOWN STAFF)*
   * ✅ **IN PROGRESS**: Complete Streets Priority List development (Transportation Board)
   * ✅ **COMPLETED**: Fossil Fuel-Free building regulations (building-transportation nexus)
   * 🏛️ **NEW**: Establish regional coordination agreements with Boston/Cambridge/Newton *(TOWN STAFF)*
   * 🧭 **NEW**: Monitor ordinance compliance and effectiveness *(ZEAB ADVISORY)*
3. **Medium-term (18-36 months)**:
   * 🏛️ **NEW**: Deploy protected bike network (15+ miles) per ordinance requirements *(TOWN STAFF)*
   * 🏛️ **NEW**: Implement bus priority infrastructure on key corridors *(TOWN STAFF)*
   * **ALL ROLES**: Launch mobility hub pilots at Green Line stations
   * ✅ **IN PROGRESS**: Regional metrics through 2025 CARP development
   * 🧭 **NEW**: Assess progress toward mode shift targets *(ZEAB ADVISORY)*
4. **Long-term (3-5 years)**:
   * ✅ **FOUNDATION SET**: Net-zero by 2040 target established through ZEAB
   * 🏛️ **NEW**: Integrate with regional mobility-as-a-service platform *(TOWN STAFF)*
   * **ALL ROLES**: Achieve 30% car trip reduction target
   * 🧭 **NEW**: Evaluate and recommend next phase strategies *(ZEAB ADVISORY)*

#### Expected Outcomes

* **Mode Shift**: Substantial (30% reduction in car trips, 50% increase in bike/walk/transit)
* **GHG Reduction**: 45-55% reduction in transportation emissions
* **Infrastructure**: Comprehensive protected bike network, bus priority lanes, mobility hubs
* **Regional Position**: Co-leader in regional transportation innovation

#### Political Feasibility: **MODERATE-CHALLENGING**

* Requires Town Meeting approval for ordinance
* Significant community engagement needed for major changes
* Some opposition expected around parking and road space

#### Resource Requirements: **SUBSTANTIAL**

* Staff time: 3.0-4.0 FTE for comprehensive implementation
* Capital: $5M-$10M (leveraging significant state/federal grants)
* Implementation period: 5 years

## STRATEGY 4: REGIONAL TRANSPORTATION LEADERSHIP (Transformative Impact)

### *15-minute city model with regional integration and innovation*

#### Core Approach

Position Brookline as a regional leader in sustainable transportation transformation, implementing 15-minute city principles, comprehensive regional integration, and innovative transportation solutions.

#### Key Components

**Strategy 3 Foundation (Maintained):** - All comprehensive transformation elements

**Leadership Additions:** - **Paris Model**: 15-minute neighborhood implementation - **Cambridge Plus**: Enhanced transportation ordinance with innovation requirements - **Boston Integration**: Regional transportation authority participation - **Innovation Leadership**: Pilot emerging technologies and approaches

#### Specific Actions

1. **Immediate (0-6 months)**:
   * ✅ **All Strategy 3 actions** (see above status)
   * 🧭 **NEW**: Research and recommend 15-minute city implementation approach *(ZEAB ADVISORY)*
   * 🏛️ **NEW**: Establish Innovation Transportation Lab with academic partnerships *(TOWN STAFF)*
   * 🏛️ **NEW**: Negotiate regional transportation authority participation *(TOWN STAFF)*
   * 📢 **NEW**: Build community vision for 15-minute neighborhoods *(COMMUNITY ADVOCACY)*
2. **Short-term (6-18 months)**:
   * 🧭 **NEW**: Draft enhanced Transportation Innovation Ordinance *(ZEAB ADVISORY)*
   * 📢 **NEW**: Advocate for Innovation Ordinance adoption *(COMMUNITY ADVOCACY)*
   * **ALL ROLES**: Launch first 15-minute neighborhood pilot (Village or Coolidge Corner)
   * 🏛️ **NEW**: Deploy advanced mobility technologies (dynamic pricing, MaaS platform) *(TOWN STAFF)*
   * 🧭 **NEW**: Establish research partnerships and data sharing protocols *(ZEAB ADVISORY)*
3. **Medium-term (18-36 months)**:
   * **ALL ROLES**: Complete first 15-minute neighborhood transformation
   * 🏛️ **NEW**: Implement autonomous vehicle preparation infrastructure *(TOWN STAFF)*
   * 🏛️ **NEW**: Launch regional mobility hub network with Brookline as central node *(TOWN STAFF)*
   * 🏛️ **NEW**: Deploy comprehensive smart transportation systems *(TOWN STAFF)*
   * 🧭 **NEW**: Monitor innovation impacts and recommend scaling strategies *(ZEAB ADVISORY)*
4. **Long-term (3-7 years)**:
   * **ALL ROLES**: Achieve full 15-minute city implementation
   * 🏛️ **NEW**: Lead regional transportation innovation initiatives *(TOWN STAFF)*
   * **ALL ROLES**: Reach 50% car trip reduction target
   * 📢 **NEW**: Share success model with other communities nationally *(COMMUNITY ADVOCACY)*
   * 🧭 **NEW**: Document and disseminate lessons learned *(ZEAB ADVISORY)*

#### Expected Outcomes

* **Mode Shift**: Transformative (50% reduction in car trips, 75% increase in sustainable modes)
* **GHG Reduction**: 65-75% reduction in transportation emissions
* **Infrastructure**: Complete multimodal network, mobility hubs, smart systems
* **Regional Position**: Recognized leader and innovation hub

#### Political Feasibility: **CHALLENGING**

* Requires sustained political leadership over multiple election cycles
* Significant community engagement and education needed
* May face substantial opposition to major changes

#### Resource Requirements: **MAJOR**

* Staff time: 5.0+ FTE with specialized expertise
* Capital: $15M-$25M (requires major grant funding and partnerships)
* Implementation period: 7+ years

## STRATEGY COMPARISON MATRIX

| Element | Strategy 1 | Strategy 2 | Strategy 3 | Strategy 4 |
| --- | --- | --- | --- | --- |
| **Primary Focus** | Electrification | + Active Transport | + Comprehensive Planning | + Regional Leadership |
| **Car Trip Reduction** | 0-5% | 10-15% | 25-30% | 45-50% |
| **GHG Reduction** | 15-20% | 25-35% | 45-55% | 65-75% |
| **Infrastructure Investment** | $0.5-1M | $1.5-3M | $5-10M | $15-25M |
| **Implementation Timeline** | 18 months | 36 months | 5 years | 7+ years |
| **Political Risk** | Low | Moderate | High | Very High |
| **Regional Leadership** | Participant | Collaborator | Co-leader | Leader |
| **Innovation Level** | Incremental | Moderate | Substantial | Transformative |

## RECOMMENDED PATHWAY: ACCELERATED IMPLEMENTATION

### *Updated based on Brookline’s substantial current progress*

### ✅ **Current Status (2024-2025): Strategy 1 Largely Complete**

Brookline has already achieved most Strategy 1 elements and significant Strategy 2/3 components: - ZEAB established as institutional framework - EV charging infrastructure deployed/planned - Complete Streets policy adopted - Major protected bike lane project (Washington Street) approved - Climate planning process active with community engagement

### **Immediate Priority (2025-2026): Complete Strategy 2**

* Focus on quick-build bike lane deployment while waiting for Washington Street
* Launch Blue Bikes expansion negotiations
* Develop rapid pilot project methodology
* Establish regional coordination partnerships

### **Near-term (2026-2028): Strategy 3 Legislative Framework**

* Draft Transportation Safety Ordinance building on proven success
* Launch comprehensive bike network beyond Washington Street
* Integrate with 2025 CARP implementation
* Establish regional leadership role

### **Medium-term (2028-2032): Strategy 4 Leadership Consideration**

* Evaluate based on Strategy 3 success and regional position
* Consider 15-minute city pilot in Village or Coolidge Corner
* Pursue innovation hub opportunities

### **Revised Decision Points**

1. **2025**: Finalize Strategy 2 expansion scope based on Washington Street progress
2. **2026**: Town Meeting consideration of Transportation Safety Ordinance
3. **2028**: Assess regional leadership opportunities post-Washington Street completion
4. **2030**: Evaluate Strategy 4 innovation leadership based on climate target progress

### Success Metrics for Each Phase

* **Strategy 1**: EV adoption rates, charging utilization, community satisfaction
* **Strategy 2**: Bike ridership, safety metrics, pilot project performance
* **Strategy 3**: Mode shift achievement, ordinance compliance, regional coordination
* **Strategy 4**: Innovation adoption, national recognition, sustainability outcomes

This progressive approach allows Brookline to build capacity, political support, and community buy-in while maintaining flexibility to adjust based on results and changing circumstances.