Feasibility Study for a Proposed Extension of the Bruce N. Freeman Memorial Path in Sudbury and Framingham

Author
Cathy Buckley Lewis

Geographic Information Systems
Kathy Jacob

Cover Design
Maciej Citowicki

The preparation of this document was supported by Massachusetts Highway Department Contract 3C PL #42456 and EOT/FTA §5303 Grant X-017.

Central Transportation Planning Staff
Directed by the Boston Region Metropolitan Planning Organization. The MPO is composed of state and regional agencies and authorities, and local governments.

October 2006
LIST OF FIGURES AND TABLES
EXECUTIVE SUMMARY
INTRODUCTION

1 EXISTING CONDITIONS
   A Demographics
   B Transportation Modes
   C Transportation Infrastructure and Services
      Highways
      Public Transportation
      MBTA Commuter Rail
      Town of Framingham
      Private Carriers
   D Crash Data

2 THE SOUTH SUDBURY INDUSTRIAL TRACK
   A History of Rail Service
      Ownership
      Passenger Service
      Freight Service
   B Description of the South Sudbury Industrial Track
      Framingham
      Sudbury
   C Right-of-Way Width
      Framingham
      Sudbury
   D Roadway Crossings
   E Environmental Issues
      Noise and Air Quality
      Floodplain Areas
      Environmental Contamination
   F Current Uses of the South Sudbury Industrial Track

3 PROPOSED RAIL TRAIL
   A Users
      Mode of Travel
      Trip Purpose
Proposed Extension of the Bruce N. Freeman Memorial Path in Sudbury and Framingham

Estimated Demand 22
B At-Grade Road Crossings 23
C Potential Destinations 25
   Trip Generators 29
   Trail Connections 29
D Parking 33
E Community Impacts 33
   Economics 34
   Health 35
   Personal Safety 35
F Costs 36
   Acquisition, Design, and Construction 36
   Safety and Maintenance 38

4 IMPLEMENTATION 41
A Acquisition of the Right-of-Way 41
B Design and Construction 42
C Operation of a Trail 43

APPENDICES
A History of Rail Ownership and Service 45
B Excerpts from the Environmental Section of the Report of the Framingham-Sudbury Rail Trail Task Force 49
C User Demand 53
# Figures and Tables

## Figures

1. Study Area  
2. Crashes Involving Pedestrians or Bicycles, 1995–2001  
3. South Portion of Study Area  
4. Central Portion of Study Area  
5. North Portion of Study Area  
6. FEMA Q3 Flood Zones  
7. Road Suitability for Bicycling  
8. Sidewalk Locations  
9. Activity Generators  
10. Existing and Proposed Facilities

## Tables

2. Transportation Modes Used to Get to Work by Employed Residents, by Community, 2000  
3. Number and Percentage of Employed Residents Bicycling and Walking to Work, by Community, 2000  
4. Number of Bicycle and Pedestrian Crashes, by Community, Boston Region MPO, and Statewide, per 1,000 Residents, 1995–2001 Inclusive  
5. Comparison of Rate of Occurrence of At-Grade Intersections on South Sudbury Industrial Track and Major Massachusetts Rail Trails  
6. Type of Mode Used on Paths, by Percentage  
7. Two-Way Motor-Vehicle Traffic Volumes, Sight Distances, Speed Limits, and Reaction Times at Road Intersections with the South Sudbury Industrial Track  
8. Estimated Policing and Maintenance Costs, by Community, per Year, Based on Lexington Estimates