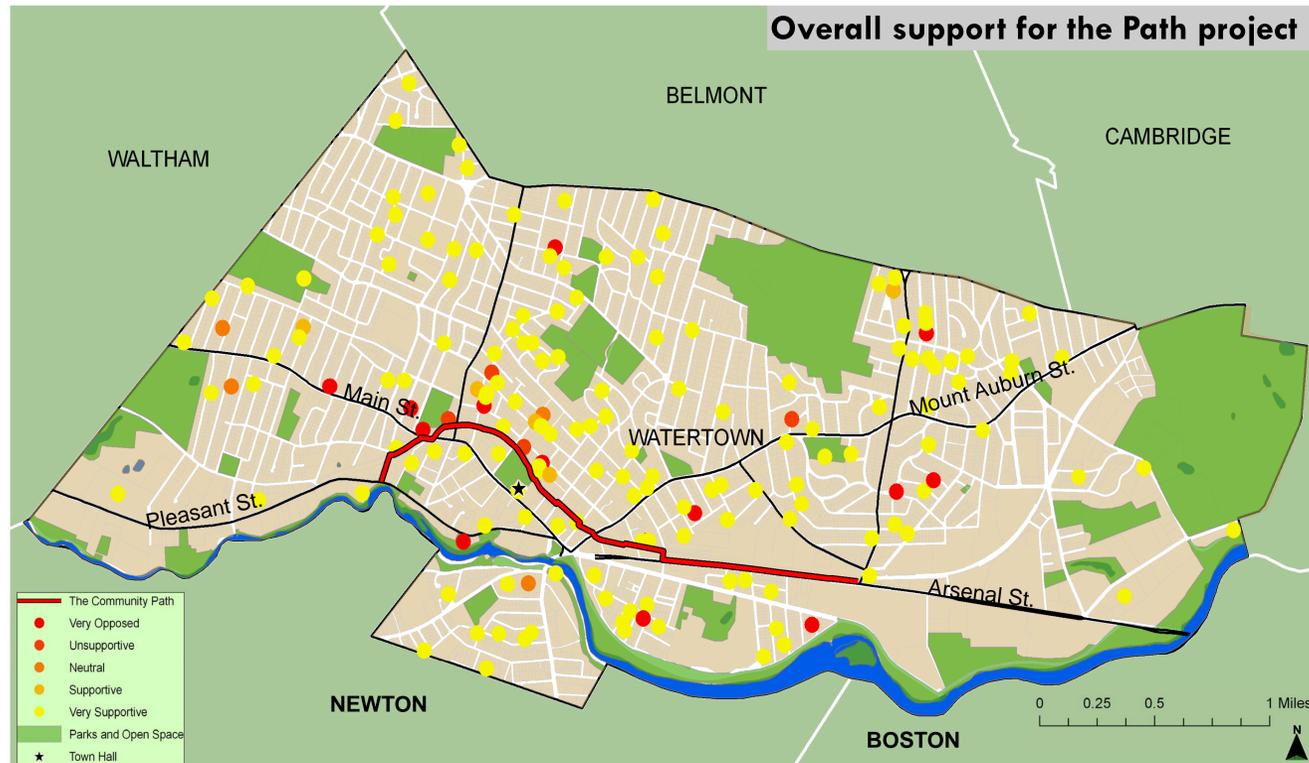


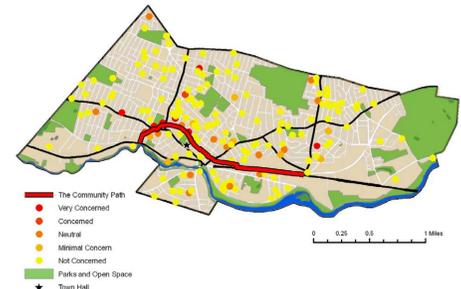
Feasibility analysis of the Watertown Community Path



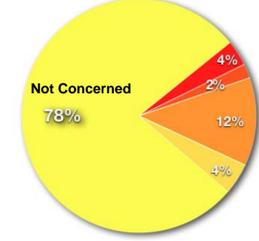
Community survey analysis



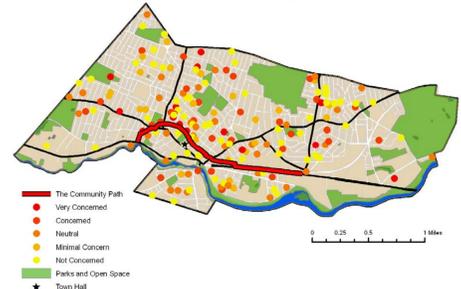
Concern for negative property impacts



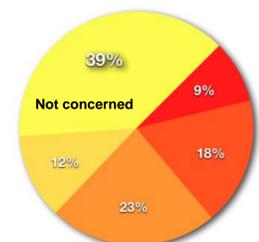
Concerns that the Path will negatively impact my property



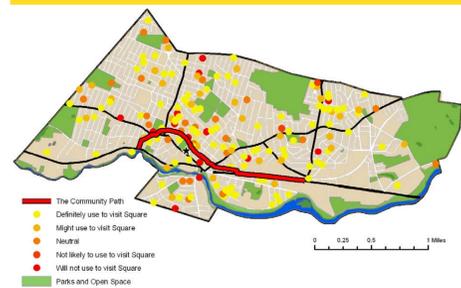
Concern for safety along the Path



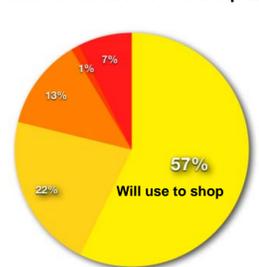
Concerns about safety in the area of the Path



Use of Path to access local businesses



Likelihood of using the Path to access businesses in the Square



Project Description

The Watertown Department of Community Development and Planning, in conjunction with the Bicycle and Pedestrian Committee and Watertown Citizens for Environmental Safety (WCES) are in the process of expanding off-street options for the citizens in the town. The Watertown Community Path will serve as a primarily off-street transportation option linking East Watertown, Watertown Square, and the Charles River. In the summer of 2010 the Massachusetts Department of Conservation and Recreation (DCR) will commence construction of a "rail trail" that will connect the Charles River Reservation Path in East Watertown to the Minuteman Commuter Bikeway in Cambridge. The next piece of this network expansion, the Community Path, has a more concentrated focus on meeting the needs of residents in Watertown by providing walking and biking access to businesses, public facilities, schools, and recreational opportunities.

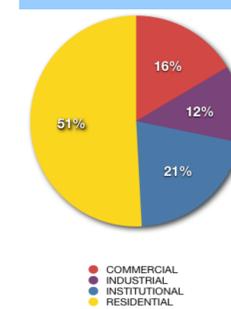
Spatial analysis for this infrastructure project is critical to address both the goal of the Path anchoring the redevelopment of lower Arsenal street and the importance of addressing citizen concerns early in the process to avoid future backlash. Comparing the land use maps to the survey results will assist in the making of basic conclusions about how residents feel towards the project compared to business owners and managers.

Survey geocoding methodology

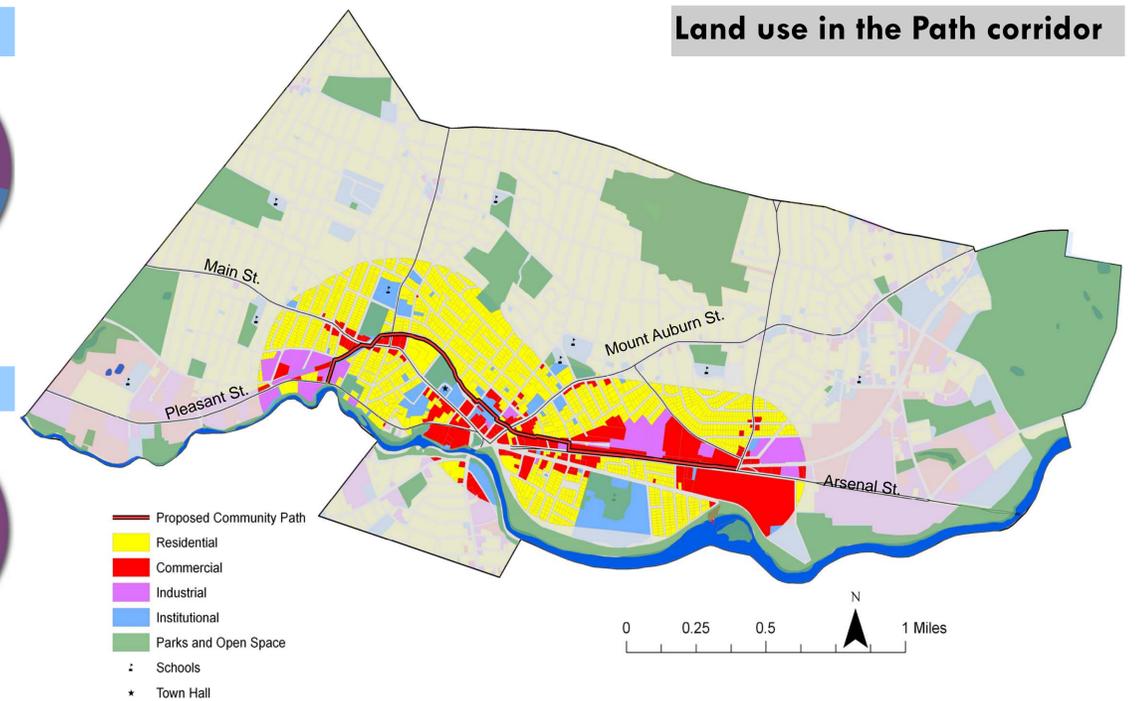
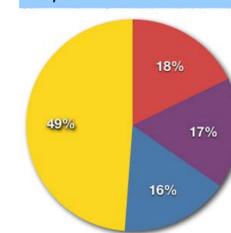
A survey completed by 256 people provides a qualitative analysis to help identify geographic areas of support and locate specific areas of concern. This information will be critical to the proponents of the project as they finalize a design and continue to build momentum behind the Community Path. The geocoded data from the survey includes the overall level of support for the project, property concerns, safety concerns, and usage. Because residents were asked to provide a street address for the surveys, they could be plotted using the parcel data from the Town of Watertown. From the initial match analysis, 183 surveys were matched above a score of 70. An additional 19 resulted in tied scores and were manually matched to addresses within 50 feet. The remaining 54 survey responses emanated from beyond the town boundary or failed to provide an address and were not plotted. This point data was modeled as a density surface, joined to census blocks, and joined to parcels; however, the clearest representation of the survey data was displayed by creating large points for each response.

Current land use analysis

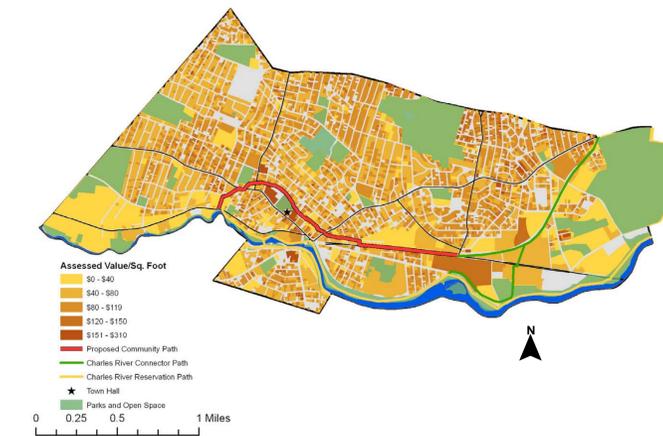
current land use mix in Watertown



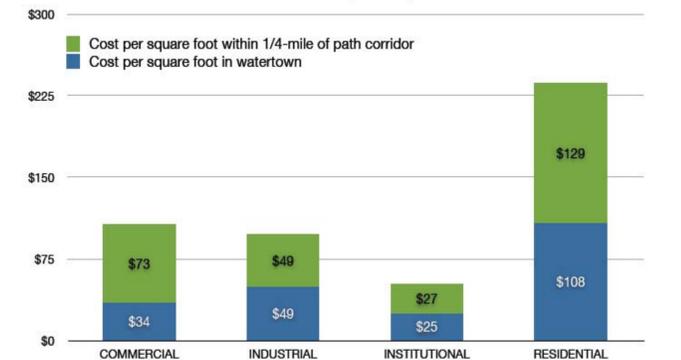
land use mix within 1/4-mile of the Path



Comparison of assessed value of property in corridor



Land Use Cost per Square Foot



Land use analysis methodology

This project can be broken into two components: an analysis of land uses surrounding the proposed Community Path and a spatial analysis of the survey completed by 255 Watertown residents. Both components feed into the larger goal of locating the best place to site the Path and what concerns should be addressed in doing so.

The current land use mix in the town, specifically those in proximity of the proposed path corridor, are being analyzed to determine both the impact of this project and identify potential areas of redevelopment. It was of special concern by WCES to indicate the schools in proximity of the path to boost the viability of their safe-routes-to-school program. Additionally, the general assessment of property values through a summary of properties inside the path buffer and outside the buffer will be used for comparison of areas where redevelopment may be favorable.

The land use data was first grouped into five primary classes: residential, commercial, industrial, and institutional, open space. For this analysis parks were excluded from calculations. From the assessor's data, acreage, total assessed value, and land use class were utilized. A buffer analysis to assess land uses and costs per square foot within a quarter-mile of the Path was completed.

Land use statistics

	Watertown land use		Path corridor 1/4-mile buffered land use	
	Acres	Assessed Value	Acres	Assessed Value
Residential	912	\$4,272,282,434	228	\$1,277,136,600
Commercial	295	\$437,239,124	83	\$263,286,800
Industrial	212	\$449,721,710	79	\$16,911,500
Institutional	375	\$402,932,820	77	\$89,864,600

Cartography: Kristopher Carter Date: May 5, 2010
 Data Sources: MassGIS, Watertown Assessor Data 2010
 Projected Coordinate System: NAD 1983 State Plane MA

