Using ArcGIS Online Tools to Support Area-Wide Planning

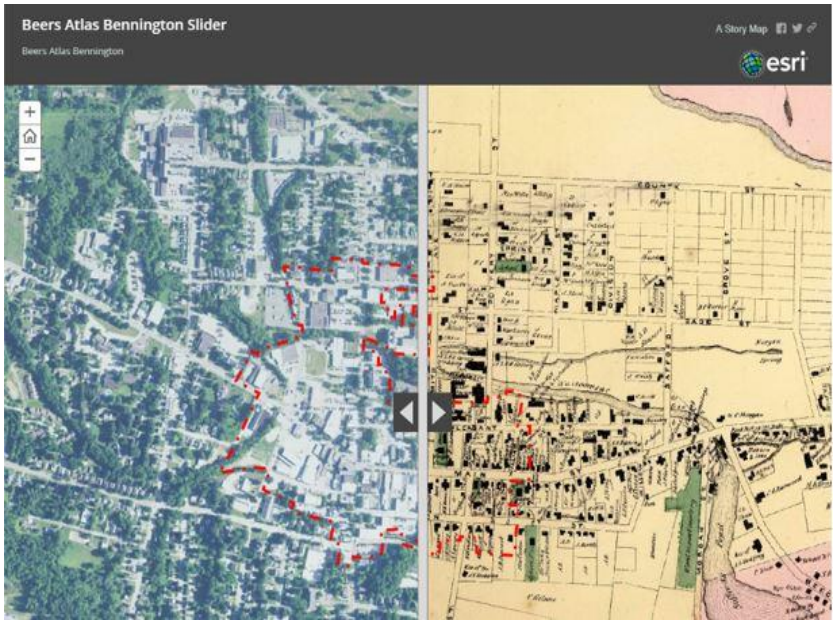
STONE ENVIRONMENTAL
100% EMPLOYEE-OWNED

Services / Expertise
Environmental Assessment and Remediation
Area-wide Planning
Brownfield Redevelopment
Geospatial & Data Solutions
Data Visualization
Story Mapping
ArcGIS Online

Markets
Local Government and RPCs
Site/Property Owners
Commercial Developers
Community-Based Organizations

Project Location
Various locations

Date Completed
Ongoing



The town of Bennington used their Story Map to gain community buy-in on redevelopment scenarios, allowing stakeholders to visualize outcomes of the area-wide plan, as well as attract potential investors to help redevelop vacant or underutilized sites in the downtown area with real or perceived contamination.

FOSTERING and sustaining a vibrant downtown is critical to any planning commission's vision for having an economically healthy community. That's why many Vermont communities are working with private and public partners to evaluate current environmental conditions and potential market concerns and integrate the cleanup/reuse of brownfields into the development of targeted area-wide plans. These plans provide a guide and vision for economic revitalization of vacant and underutilized sites, supported by information on—and an analysis of—environmental and market conditions; assist economic development partners in identifying the opportunities and challenges presented by conditions in the downtown area; and present a vision for the redevelopment of a key cluster of parcels in the area, including implementation steps that will assist the community and its partners realize a transformation in the area.

Since 2010, Stone has successfully managed several Area-wide Assessment (AWA) and Planning studies for communities across Vermont, including Barre, Richford, Winooski, Essex Junction, St. Johnsbury, Northfield, Bennington, and Swanton. Critical to the success of these projects has been the use of ArcGIS online tools and story maps to support planning, as well as communicate the results of these studies to gain community buy-in and stakeholder interested in proposed planning projects.

In Bennington, Vermont, Stone teamed with Greenman-Pedersen, Inc., Doug Kennedy Advisors, and a local architect firm to provide Area-wide Planning Services

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for the entire designated downtown area. Using ArcGIS, Stone helped the town perform an environmental and infrastructure assessment. Information related to the appraisal—including data about historical land use, natural resources, infrastructure, and brownfield sites—was collected, stored, and managed in a geodatabase. Using ArcGIS Online, stakeholders were able to quickly access information for any parcel in the downtown area.

The Stone Team gathered public input of the proposed redevelopment in an unconventional manner—input was gathered at a local farmers market and a home brewers' festival. Revised redevelopment plans were used by Bennington Regional Planning Commission while they recruited a perspective development team. Findings from the existing conditions inventory and analysis, conceptual redevelopment plans, and 3-D renderings were presented at a well-attended public meeting in Bennington, as well as conveyed online using a Story Map (https://bit.ly/2iN3zwb).

The Bennington Downtown Area-wide Plan Story Map proved to be a key tool for developing stakeholder buy-in and building interest in the project. Community members were able to access the Story Map's easily navigable platform to find information about the area's history, setting, resources, and the concept redevelopment plans. It was also especially helpful for prospective partners as they evaluated property development opportunities by bringing development scenarios to life. The Bennington Downtown Area-wide Plan Story Map (see: http://arcg.is/1mcFYls) was an Esri Partner Conference 2017 Award Winner for Best Use of Story Maps.

In 2011, Stone performed Area-wide Assessment of the Bay Street Project Area in St. Johnsbury, Vermont. The overall objective of this AWA was to provide a preliminary evaluation of environmental conditions and potential environmental concerns within the assessment area, which included 41 properties along Bay Street. As part of this project, Stone reviewed pertinent historical documents, published geologic literature, Town records, archives from the St. Johnsbury Athenaeum and Fairbanks Museum, Federal and State environmental databases, and VT DEC files for known hazardous waste sites in the vicinity.

Using the results of the AWA, the Northeastern Vermont Development Association retained Stone in 2018 to develop web-based ArcGIS Online map to assist in upcoming brownfield redevelopment efforts. Stone compiled data from the AWA and designed an online, interactive mapping application, including user-friendly features. The map, which is accessible to the public, includes baselayers such as roads, parcels, planning boundaries, FEMA flood zones, and hydrography; managed environmental sites from Vermont Agency of Natural Resources (ANR); potential contamination areas including railyard location, petroleum tank locations, building locations with potential contamination; and historic uses by date and type. Using the mapping application, users can navigate the various datasets, zoom in and out, and identify on features to obtain additional information.