











SOMERVILLE FACILITIES MASTER PLAN

Final Report

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Municipal Participation

The planning process included input and ideas gathered from many municipal departments and public officials who responded to surveys and participated in interviews and informal discussions that shaped the findings and recommendations contained within this report.

Consultant Team

The Cecil Group, Inc. - Municipal facility planning, Land use and urban design

Arrowstreet Inc. - Architectural design

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Section 1: EXECUTIVE SUMMARY

Executive Summary

This study is designed to provide Somerville with improved and consolidated municipal offices that can increase service delivery and efficiency, obtain a high level of sustainability and quality, provide a positive economic impact on their neighborhoods, and uphold and advance Somerville's strong sense of community. This report describes the ways this could be achieved.

Project Overview

The City of Somerville strives to provide its residents and businesses with fully accessible and cost-effective government services. Online resources and information, and the 311 "One Call to City Hall" phone line, are some of the ways the City has advanced service delivery. However the need to provide buildings and facilities for civic commerce and public services will always remain.

The City of Somerville currently provides municipal services in numerous dispersed offices located throughout the city. In an effort to increase efficiency and service quality the City studied consolidation options using the various existing municipal facilities for quite some time. The *Municipal Property Comprehensive Consolidation Plan* was prepared by HMFH Architects in 2007 and concluded that to accommodate a consolidation of municipal offices an expensive retrofitting process would be required for any of the City's existing facilities. The HMFH study also concluded that, even after retrofitting, the existing stock of municipal facilities would not be well suited for municipal administrative purposes.

Given the HMFH findings, the City of Somerville has begun studying the implications and possibilities of constructing a new facility or facilities that could efficiently accommodate multiple municipal departments and simultaneously improve constituent services. This study, the *Municipal Facilities Master Plan*, has been commissioned by the City of Somerville to comprehensively assess space needs and develop a cohesive approach to meeting those needs.

The primary objectives of this Municipal Facilities Master Plan are:

• Determine the office space required for the identified municipal departments and programs today, based on established space and furniture standards. Projections for future demands will need to be developed to determine further expansion of government services.





- Recommend facility consolidation based on department efficiencies and service requirements.
- Assess sites and scenarios for locating a consolidated municipal facility.
- Evaluate preliminary cost implications of new construction of the recommended municipal facility.

Previous Studies

The following studies and plans were prepared for the City of Somerville and provided to the consultant team as support and background resources for this *Municipal Facilities Master Plan*.

- Municipal Property Comprehensive Consolidation Plan, by HMFH Architects, 2007
- Feasibility Study for the Police and Fire Departments, by DiMarinisa & Wolf, 2002
- *Facility Planning Study for the Somerville Public Library*, by Providence Associates Inc, 2006
- City of Somerville Archives & Records Management Report, by Inlook Group, 2004
- *Somerville Public Library Addition and Alterations* architectural plans by Shepley Bulfinch Richardson and Abbott, 1999
- Union Square Redevelopment Parking Analysis, by Walker Parking Consultants, 2010

Findings and Recommendations

This study provides a basis for evaluating and advancing new consolidated, efficient, quality, and sustainable municipal facilities in the City of Somerville. This study documents a survey of municipal department needs, develops a potential building program for the municipal departments included in the study, provides a site and facility scenario evaluation, and offers a preferred scenario recommendation with financial analysis and implementation strategies.

Department Needs Assessment

A survey was distributed to the municipal departments included in this study to determine the existing space needs. The City department space and needs assessment identified a number of key factors for consideration:

- There are fifty-seven individual departments and divisions operating in eighteen different locations. Figure 1: Existing City Department Locations identifies the locations of the municipal departments and divisions included in this study. There are also thirty-two official municipal boards, authorities, committees, and commissions that were included in the survey.
- This Study does not include all City departments or properties. Although many of the City departments were contained within the parameters of this study, particular facilities and departments were not included, such as school buildings, fire stations, branch libraries, and the City staff associated with each of these facilities.
- The data that was gathered as part of the survey from each department has

been incorporated into a database that may be queried for common and unique attributes (*Attached in a compact disk as Appendix A: Department Space Survey Database*).

• The database created for this study was used to assist in the development of the municipal facilities Building Program through a series of specified queries.

Building Program

This study's space assessments determined that the space required to adequately serve the municipal departments included in this study would be equivalent to 271,848 square feet of floor space. This figure includes everything from office space to DPW storage areas and is detailed below. Identifying the total building program required for the City of Somerville's municipal operations is a critical step in the process of identifying space efficiencies. Through the site and scenario evaluations in this document, additional efficiencies are recommended and include a phased program of construction and consolidation of offices. However, existing buildings that are in good condition and appropriately serve the departments which they contain do not need to be and should not be replaced.

Site and Scenario Evaluations

A total of nine potential sites were generated by City staff for this study. These sites were reduced using a set of locational and siting needs criteria, which include:

- Utilizing the City's existing land inventory where possible
- Location adjacent to, or near, multiple public transportation options
- Central locations to City's residential distribution
- Zoning and development potential of site
- Compatibility with adjacent uses
- High visibility for uses that:
 - Spur economic development
 - Create a critical mass of uses and activities
 - Support evening and cultural activities
- Separation for users that:
 - Require high security
 - Operate heavy and emergency equipment

Ultimately, the potential sites were refined into four scenarios for analysis with the building program developed for the City Hall, Central Library, School Administration, Public Safety Building, Department of Public Works and Fire Station No. 3.

Based on the analysis of the building program, several scenarios for consolidation of municipal offices were considered using four alternative sites determined to be most efficient in providing improved services and building options. This analysis concluded with the identification of the Recommended Scenario [Section 9]. If other potential sites are identified in the future, the same needs criteria could be used to compare them with the sites analyzed in this report.

Overall Facilities Recommendations

The Recommended Scenario was prepared by evaluating the building program and the potential sites presented for this study. The scenario evaluations took into account the multiple values in siting City offices together in locations where their presence would generate economic activity. The major elements of the Recommended Scenario are:

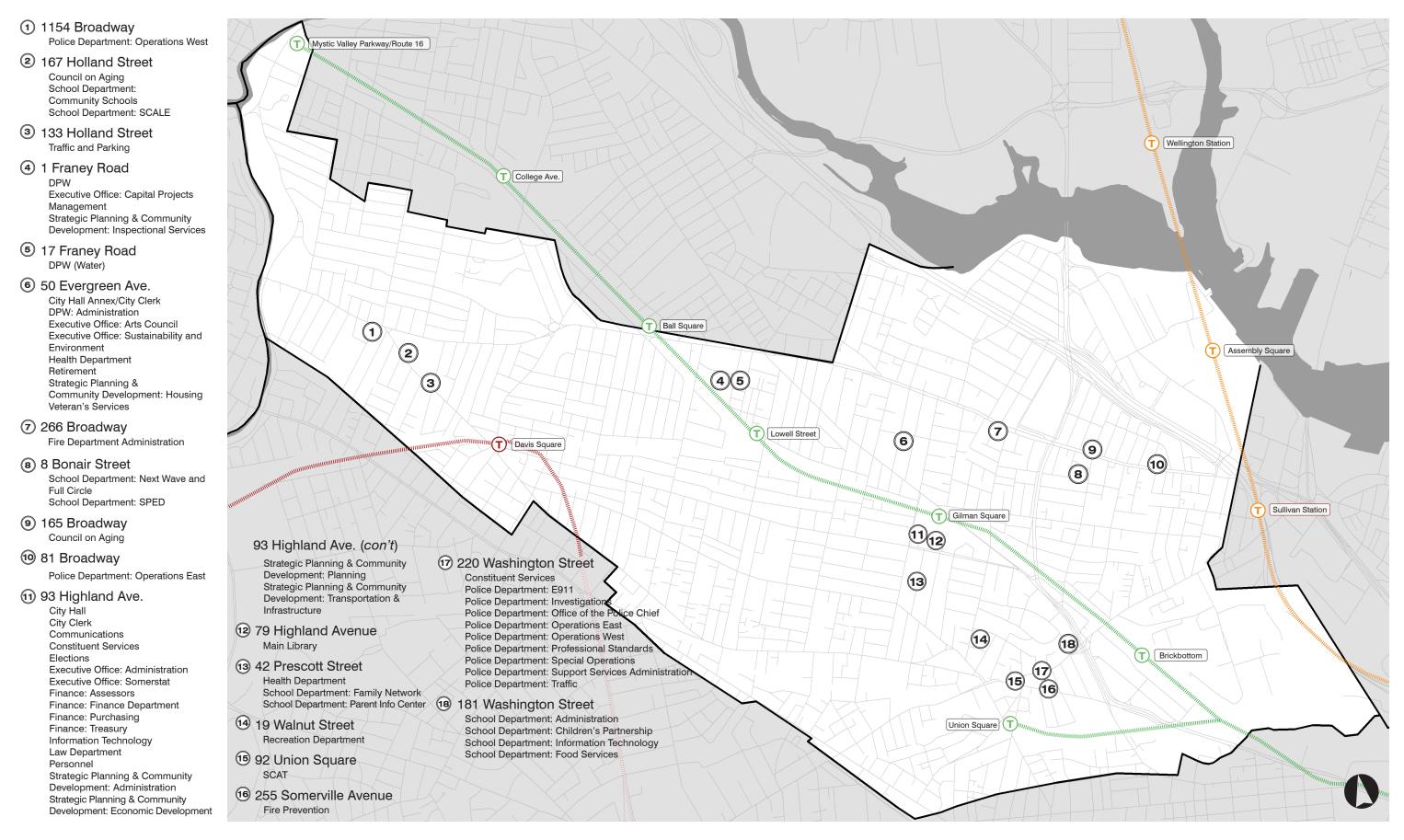
- The construction of a new City Hall building that consolidates the general government offices (City Hall, City Hall Annex and other offices) and the Library (Central branch) in Union Square at the Public Safety block (area between Washington Street, Merriam, Somerville Avenue, and Prospect Street).
- The relocation and construction of a new Public Safety building to replace the existing facility. The Public Safety Building would include the Somerville Police Department Headquarters, the Somerville Fire Department Administrative Offices and the offices of the Somerville Fire Department Fire Prevention unit.
- The relocation and construction of a new Fire Station No. 3 to replace the existing facility.
- Relocation of the School Administration offices and certain School Department programs, which are in separate and leased spaces, to the current City Hall, thus creating an educational campus with Somerville High School.
- Upgrading other existing municipal buildings and properties that will continue to be utilized for municipal department purposes.

The Recommended Scenario centralizes many municipal departments which are currently dispersed throughout the city in a primary City Hall facility. This consolidation will improve department operations and constituent services as well as generate significant economic and activity impacts in Union Square. A new Public Safety Building will likewise enable improved public safety operations for the City of Somerville. The relocation of the School Administration offices will enable the City to realize department efficiencies through centralized offices and lead to a campus for the City's educational resources. Municipal properties that are no longer necessary due to the consolidation of departments can be dedicated to other municipal needs or sold for private uses.

Cost Analysis

The financial analysis conducted for the Recommended Scenario in Union Square used a total public facility building program associated with this scenario of 111,000 square feet of new construction which is expected to entail \$29,200,000 in new building and parking construction. The Recommended Scenario includes the options for private development that could offset acquisition and construction costs, development agreements that could relieve the City of construction costs, facility maintenance costs and increase the tax base for the City, and sales of public properties to raise capital.

FIGURE 1 | EXISTING CITY DEPARTMENT LOCATIONS



Implementation Strategies

Accomplishing the Recommended Scenario will require a carefully orchestrated program, or implementation plan, of relocations and reconstruction. While some phases of the implementation strategy will be able to occur concurrently, the key steps in general chronological order are listed below:

- *Construction of a new Central Library above new subsurface parking* This will allow the City to take advantage of grant funds for design and construction of libraries available from the State Library Commission [605 CMR 6.00] during the 2010-2011 funding cycle. This would advance new construction as an alternative to expansion at the current location of the Central Library, based on the analysis presented in this report.
- *Relocation of the Public Waste Facility* While the Waste Transfer facility was not part of this study, the site where it is located was considered as one of the options for new municipal facilities given its key location. Consequently, the proposed phasing of the preferred option presented in this plan will require relocation of the Waste Transfer facility.
- *Construction of a new Public Safety Building* Upon relocation of the Waste Transfer facility, the new Public Safety Building could be erected on the site together with significant new private development. This would include the Police Department, the Emergency Operation Center, and the Fire Department Headquarters. This phase could occur after the construction of the City Hall office building, if interim parking needs are addressed at the current Public Safety Building location.
- Construction of centralized City Hall office building A new City Hall, consolidating departments currently located in the existing City Hall with other City departments located throughout the city, would be built in a more efficient, sustainable, and functional building. Private development would occur adjacent to the new City Hall on the site presently occupied by the Public Safety Building.
- *Relocation of School Department facilities and offices* With the relocation of existing City Hall offices to the new, consolidated facility, the existing City Hall will be available to relocate School Department offices, thereby creating an educational campus within the City. Certain ARRA [http://www.ed.gov/policy/gen/leg/recovery/index.html] and SBAB funds [603 CMR 38.00] may be available for application to the improvements for educational facilities necessary to create the campus.
- *Rededication or sale of vacated municipal properties* By consolidating and reducing the building spaces needed for City operations, the overall plan will create long-term cost savings. However, there are significant costs involved in completing the recommended building program. To compensate against those costs and to reduce City budget liabilities, this plan proposes the sale or leasing of the vacated properties. Values for many of those properties have been identified by the City for tax assessment purposes, but would need to be appraised to determine their market value.
- *Renovations and upgrades of existing municipal properties that continue as municipal facilities* Where City offices and facilities are to remain, continued maintenance and improvement of the buildings and physical plant is needed







regardless of the adopted program. This includes the Public Works Facility, Fire and Police Stations, and City Schools. Budgeting for regularly scheduled maintenance of City properties will continue to be necessary.

As the City moves forward in making its siting decisions, it is hoped that the data collected and analysis prepared in this study can serve as a foundation for those decisions and deliberations.

Section 2: EXISTING NEEDS ANALYSIS

Space Programming

In the first phase of this project, data gathering took place to quantify the needs of the City government for office space and other supportive spaces such as meeting space, storage, etc. This information can be used as decisions are made relative to capital investment and the allocation of space in municipal facilities. The data describes the functional and space requirements of each department or division, relationships of the departments and divisions, and the need for supporting spaces, building systems and equipment.

The purpose of gathering this information is to create a basis for designing a successful, high-performing building(s) that will deliver City services most efficiently. Specifically, it is anticipated that the buildings designed from this information will be functional in supporting the municipal operations, productive by being flexible in accommodating current and future conditions, safe and secure for users and customers, and environmentally and financially sustainable.

Purpose of Space Programming

A key goal in this municipal facility planning effort was to determine if greater efficiencies in office space could be obtained that would result in overall cost reductions to operate the City government with more efficient use of space. There were several steps involved in the space programming beyond an existing needs analysis:

- Establish goals
- Survey departments and divisions
- Determine appropriate standards for space requirements
- Calculate space needs by office and function
- Research of similar government office spaces
- Determine quantitative requirements
- Identify strategies
- Summarize the program









Survey Methodology

The project scope included preparation of a database of space requirements in a format that could be utilized for testing different configurations of departments and functions as a means to find the best fit for offices and sites. An innovative way of generating a large database of information for a large number of entities and conditions was created, which will allow the City to revisit the information for future planning.

This space programming analysis was performed for the following City departments and divisions, which were selected by the City for this study. The reasons for identifying these specific departments and these divisions are one or more of these factors:

Cost factors – The departments and divisions are in leased space, which may not be an efficient use of funds

Organizational factors – The arrangement and locations of the departments and divisions may not be the best in terms of city organization and 'customer' relations

Management factors – In some instances, divisions are separated from their departments, which may put a strain on intra-department communications

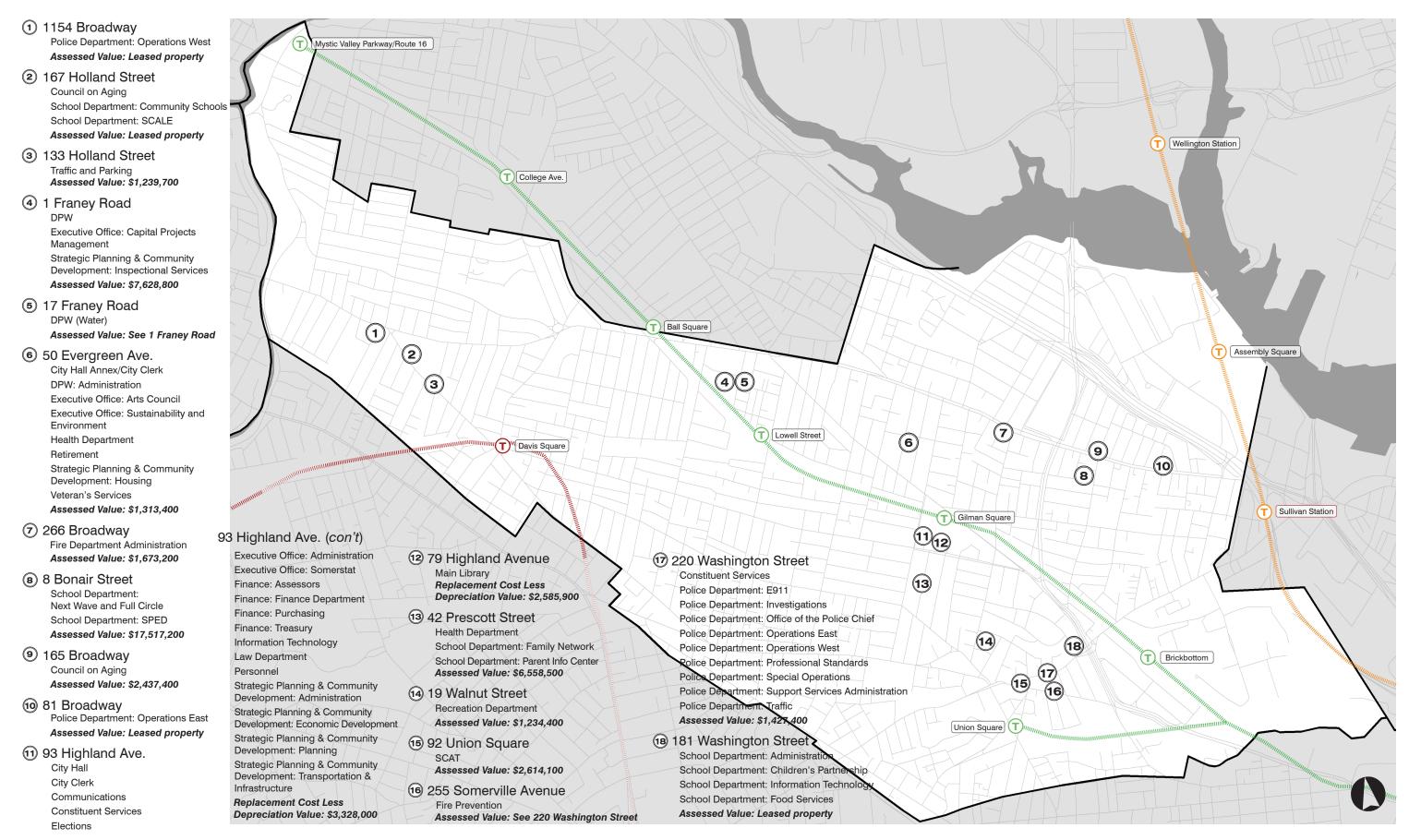
Building factors – Certain buildings that the departments and divisions occupy are either over crowded or are not used most efficiently because of age and design

Maintenance factors – Certain buildings that the departments and divisions occupy are not in good condition and require moderate to significant upgrades

List of City Departments and Divisions Surveyed

City Clerk Communications Constituent Services Elections Executive Office – Administration Executive Office – Arts Council Executive Office – Capital Projects Management Executive Office – Capital Projects Management Executive Office – Council on Aging Executive Office – Somerstat Executive Office – Somerstat Executive Office – Sustainability and Environment Finance – Assessors Finance – Finance Department (Auditing and Internal Controls) Finance – Purchasing Finance – Treasury Fire Department – Administration

FIGURE 2 | ASSESSED VALUE OF PROPERTIES



Fire Department – Fire Prevention

Fire Department – Station No. 3

Health Department

Information Technology

Law Department

Library

Personnel

Police Department – E911

Police Department - Investigations

Police Department – Office of the Police Chief

Police Department – Operations East

Police Department - Operations West

Police Department – Professional Standards

Police Department - Special Operations

Police Department - Support Services Administration

Police Department - Traffic

Public Works Department – Administration

Public Works Department - Buildings & Grounds

Public Works Department - Electrical

Public Works Department - Engineering

Public Works Department - Highway

Public Works Department - Water Department

Public Works Department - Weights & Measures

Recreation

Retirement

School Department - Administration

School Department - Children's Partnership

School Department - Community Schools

School Department - Family Network

School Department - Food Services

School Department - Information Technology

School Department - Next Wave and Full Circle

School Department – Parent Info Center

School Department - SCALE

School Department - SPED

Somerville Community Access Television [SCAT] (note: this is an independent organization currently housed in a City facility) Strategic Planning & Community Development – Administration Strategic Planning & Community Development – Economic Development Strategic Planning & Community Development – Housing Strategic Planning & Community Development – Inspectional Services Strategic Planning & Community Development – Planning Strategic Planning & Community Development – Planning Strategic Planning & Community Development – Transportation & Infrastructure Traffic & Parking Veteran's Services

In addition, the following boards, authorities, commissions, and committees were surveyed regarding meeting space requirements. This was to determine the appropriate number, size, and scheduling of meeting spaces.

Affordable Housing Trust Arts Council Board Design Review Committee **Bicycle Committee** Board of Assessors Board of Aldermen Board of Health Commission for Persons with Disabilities Commission on Energy Use and Climate Change Condominium Review Board Conservation Commission Council on Aging **Election Commission Ethics** Commission Fair Housing Commission Historic Preservation Commission Human Rights Commission Library Board of Trustees Licensing Commission Listing Board Multicultural Affairs Commission Municipal Athletic Facilities Commission

Municipal Compensation Advisory Board Municipal Scholarship Committee Planning Board Recreation and Youth Commission Redevelopment Authority Retirement Board Traffic Commission Veterans Commission on Monuments Somerville Commission for Women Zoning Board of Appeals

Survey Questionnaire

The form for the survey was an electronic questionnaire created as an MS Excel spreadsheet program. The reasons for this form were:

To efficiently collect data – the forms can be electronically transferred and completed at a computer work station, sent back, and collated.

To ensure consistency across the database – a set number of program areas with specific questions were drafted to allow comparisons. In addition, pull-down menus provided choices for the person filling out the form.

To provide accuracy in content – the spreadsheets could be populated with current staffing as determined by City personnel lists and other data that could be confirmed by the department while completing the form.

To allow real-time calculation of program needs – formulas embedded within the spreadsheet could be included for immediate calculations of area and space requirements.

To allow future analysis of the data – the database of information will be available for future review and consideration for different scenarios.

Electronic versions of the survey questionnaire used in this study are included as Appendix A: Department Space Survey Database. There are eight sections to the survey:

- Department Information and Locations
- Hours of Operation and Peak Times
- Office Requirements by Personnel and Intra-office Adjacencies
- Public Interface
- Meetings and Meeting Spaces
- Storage Space, Equipment and Vehicles
- Interdepartmental Adjacencies
- General Questions on Operations and Needs

Pre-populated information in the questionnaires included department, location, and staffing. The pull-down menus provided further support for the person completing the form. An instruction sheet was also prepared, and a testing of the questionnaire with one of the departments was made to determine ease of use. The form was completed in 20 minutes and found acceptable. The overall process of distribution and collection of surveys took three months to complete. The response rate for complete data was 95 percent (fifty four of the fifty seven departments or divisions). The remainder of the data was projected based on related department responses.

Survey Results

The collected surveys were entered into a single database file containing a number of query forms used to provide listings of space requirements and functions. These forms are included in the enclosed CD *(Appendix A).* The results were tallied for overall needs and then broken down into departments and clusters of departments.

Section 3: BUILDING PROGRAM STANDARDS

Office Space and Furniture Standards

To accommodate the most efficient use of space and provide a basis of generally acceptable standards of function and design, a review of comparable government standards was completed to establish the standards for new facilities.

Federal, State and Commercial standards

The program developed for the City offices is based on standards that have been researched from other jurisdictions and compared to commercial spaces. According to a 2002 study by the Government Services Agency and a review of other government and commercial program standards set in jurisdictions across the country, the range of space allocated per person ranges from 152 square feet to 325 square feet. The recommended standard for the federal government is 200 square feet per person, a figure that is recommended for City office facilities as well. This only applies to the office functions and not the other service functions such as the library, public safety and public works facilities that have unique space requirements; such as book stacks, holding cells and garages.

Office Systems

Modular office systems within open floor plans are quite attractive as an alternative to fixed walls to allow greater flexibility and efficiencies. Typical office systems range significantly in design and cost, but can significantly reduce building costs through:

- Reduction in interior wall construction;
- Open floor plan for more efficient light and heat distribution;
- Ability to rearrange the systems for different floor layouts and staffing;
- Standardized maintenance units and items for all offices.

Proposed Office Space Standards

Based on the analysis and the design considerations from this study, the following space planning and design guidelines are recommended:







- In order to create flexibility, promote air quality, increase natural light penetration and reduce costs, attempt to limit the number of enclosed workstations to 45% of the total workstations on a floor.
- Enclosed workstations may be provided to senior managers. However, the supervision of staff and occasional confidential meetings is not usually considered sufficient cause for an enclosed workstation. Use of meeting rooms is a more efficient solution.
- For periodic large group (more than 10 people) meetings, departments can provide for conference-size rooms by connecting adjoining meeting rooms with ceiling height, soundproof, moveable partitions.
- Departments should consider shared support spaces and equipment to reduce costs.
- Plan space so that short term space requirements may be accommodated without unnecessary costs for long term needs to expand or reduce spaces.
- To provide maximum functionality, workstations, department meeting rooms should be equipped with furniture, computer equipment and communications connections.
- To create flexibility, apply a modular approach to planning; i.e., plan spaces which are compatible with building grids.
- Plan the size of smaller support spaces so that they can be interchangeable with workstations for people.
- Standardize workstation furniture so that, when moves occur, only people need to move.
- File storage should be centralized and digitized where possible. This includes the use of on-line forms for services, licenses and permits.

This study proposes a standardized office system to meet the guidelines for most efficient use of space and interchangeable furniture. Figures 3A: Office Plan Layouts (Clerical/ Intern and Professional) and 3B: Office Plan Layouts (Senior Professional and Manager/ Executive) provide examples of graphic layouts for the different standards which follow.

Examples of these office system layouts and styles are shown in Figure 4: Examples of Office Furniture Systems.

180-250 square feet – Allows frequent meetings with up to four others and requiring confidentiality, security, visual and acoustical privacy. Typical layout for large department manager or equivalent.

108 square feet – Allows meetings with up to two others and requiring confidentiality, security, visual and acoustical privacy. Typical layout for small department manager, senior position or equivalent.

90 square feet – Concentrated multi-source paperwork: compiling information, reading, writing, analyzing, calculating and referencing multiple sources of material; allows for manual and automated drafting functions. Typical layout for managerial, professional or technical staff.

72 square feet – Multi-task paper intensive work: telephone work, keyboarding, filing, sorting documents, handling mail, editing, operating equipment, scheduling, receiving visitors. Typical layout for administrative support staff.

48 square feet – Specific, task-oriented work, focusing on data input into electronic media. Typical layout for clerical and data-entry staff.

File Storage

An important requirement for municipal offices is to provide storage of documents that are processed in the departments. This may include processing applications, or storage of permanent records such as births, deaths, and voting. File storage is regulated under MGL Chapter 66, s.11 with regulations promulgated by the Massachusetts Supervisor of Public Records. To assist in creation of a comprehensive program for records management, the City completed a study; Archives & Records Management Report (Inlook Group, 2004), which made specific recommendations for upgrading records storage and electronic file systems. The recommendation is to continue the document archive management system currently in operation, using dedicated record management and archive staff under the direction of the City Clerk's Office. The current system utilizes multiple document storage techniques as determined by State regulations and resources. Currently, the City of Somerville maintains records through electronic storage managed by the City, off site file storage managed by a private entity, and within public buildings managed by part time staff through the City Clerk's Office. The current central storage facility for the City of Somerville is located in the basement of the City Hall Annex building.

Within a new general government building, there will be a need for storage vaults, with between 5,000 and 10,000 cubic feet of storage, with a 6-hour fire rating. If the vaults meet or exceed 25,000 cubic feet of storage, their construction will require fire suppression systems, but are appropriate as a centralized storage facility for records that require long-term maintenance.

22 | BUILDING PROGRAM

FIGURE 3A | OFFICE PLAN LAYOUTS (CLERICAL/INTERN AND PROFESSIONAL)

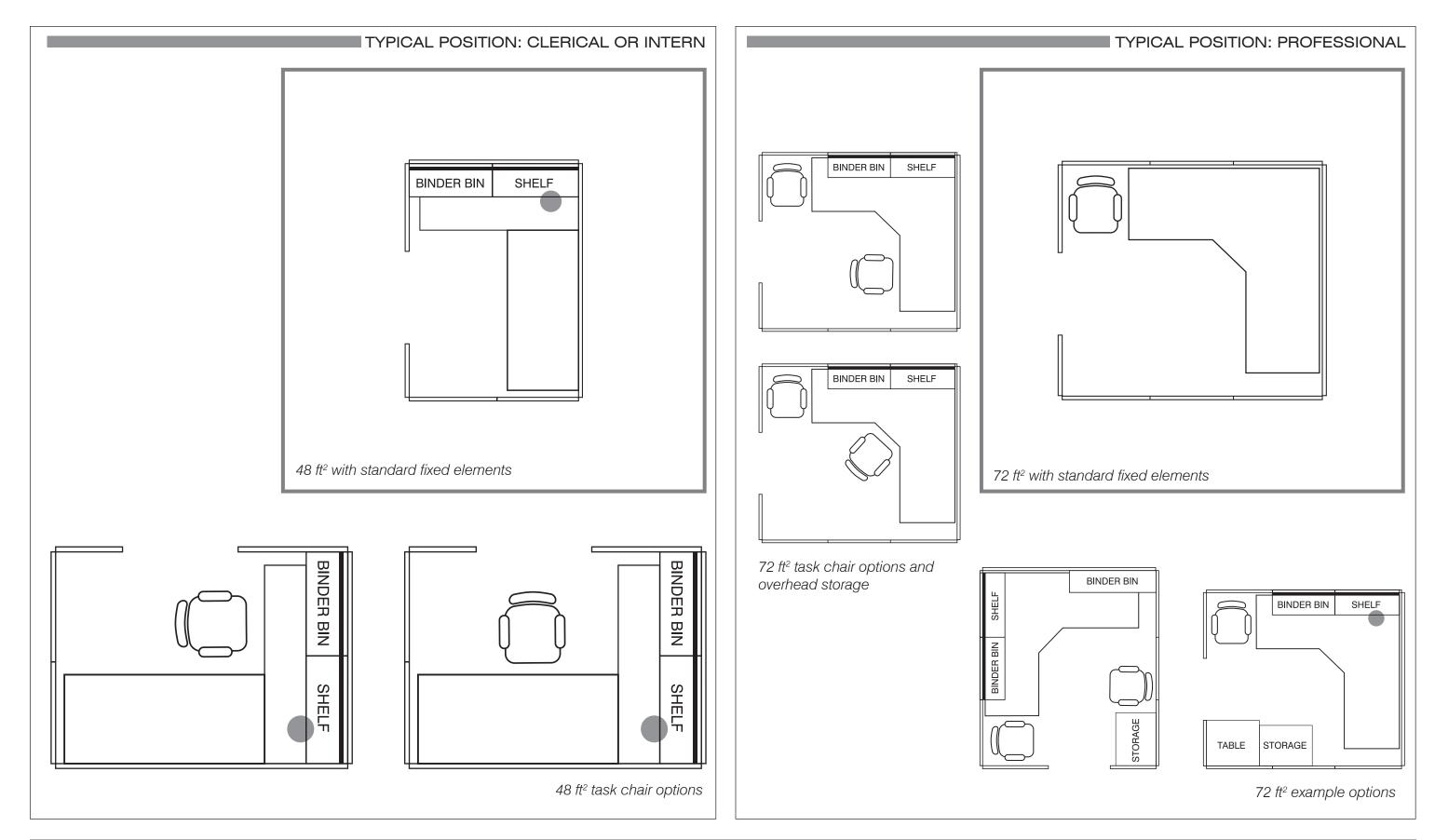


FIGURE 3B | OFFICE PLAN LAYOUTS (SENIOR PROFESSIONAL AND MANAGER/EXECUTIVE)

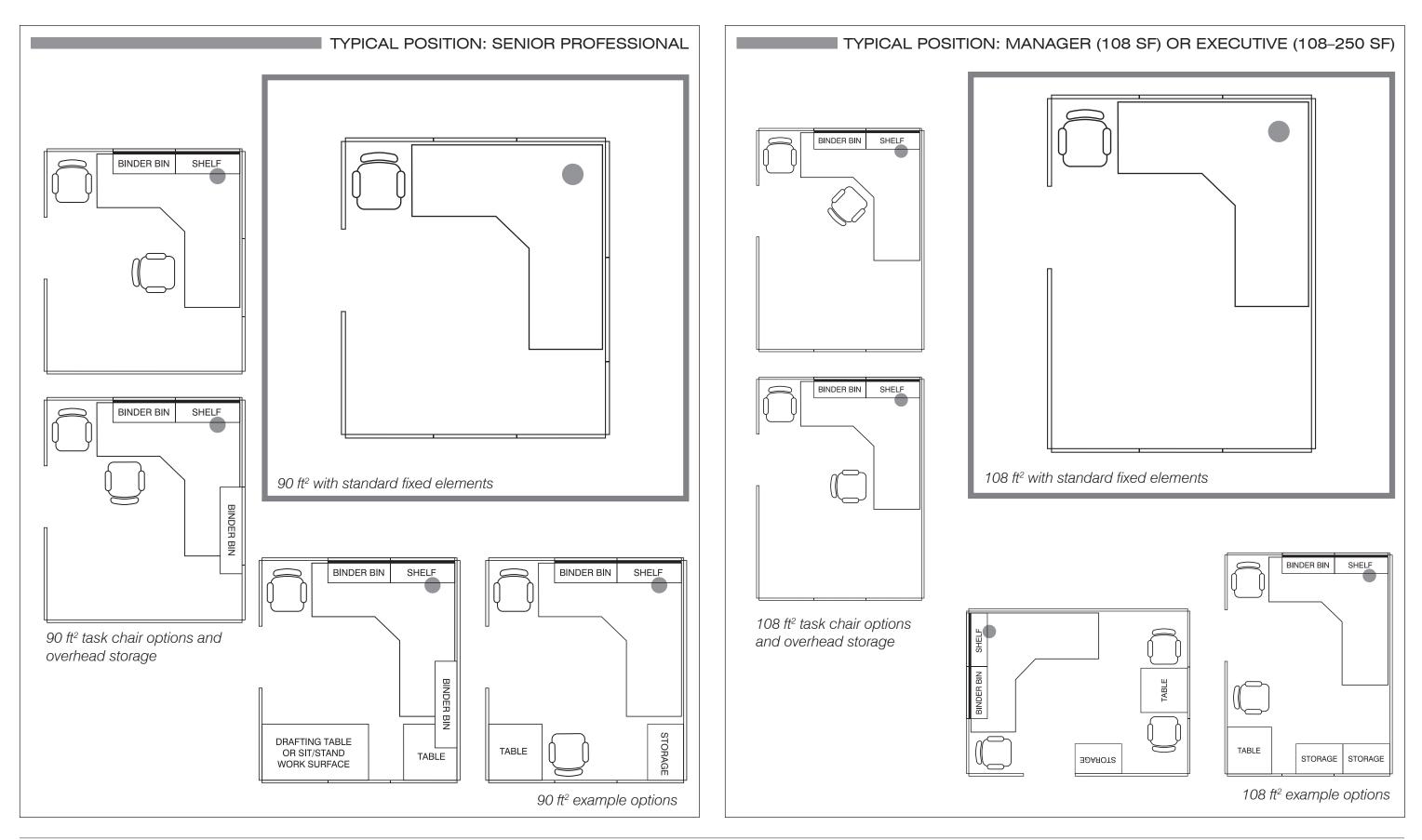
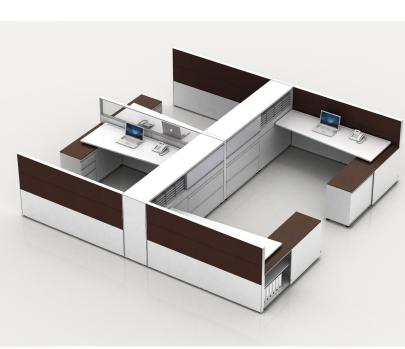


FIGURE 4 | EXAMPLES OF OFFICE FURNITURE SYSTEMS















26 | BUILDING PROGRAM

Section 4: SPACE NEEDS ANALYSIS

The collected data and the established space standards provide the foundation for the comprehensive building program for the City departments, divisions and properties reviewed in this study. Employee workspaces were calculated for each City department using the data collected through the municipal department surveys, the standardized office furniture system, and industry building standards. Unique municipal elements such as vault storage, television studios, community meeting rooms, and constituent services areas were also captured through the survey, evaluated and included in the comprehensive building program.

Following these calculations, building program efficiencies and optimal utilizations were sought through shared resources, consolidated departments, specific building types and facility locations. The building program evaluation process led to the emergence of six City department groupings as appropriate independent components. These components maximize the efficiency of their combined departments and can function in a highly independent manner. However the identification of these components as independent entities does not prevent them from being grouped together in the same location.

The calculation of space needs was generated by determining office space needs based on employees and adding circulation requirements. Additional program elements include meeting spaces, lobbies, and common storage spaces, together with employee facilities such as showers, kitchens, and lactation rooms. Comfortable office spaces are typically planned at about 200 square feet per employee. Unique and nonoffice-related spaces are not calculated by employee but according to existing spaces and potential expansion for code and certification requirements. These include such spaces as equipment garages, special public safety facilities, library stacks, studios, and other spaces.

Table 1 provides a detailed square footage calculation of all City components included in this study.





City Hall Office	SF	Notes
Department Workspaces		
Executive	4,618	
Finance	3,999	
Clerk	697	
IT	761	
Constituent Services	1,523	
SCAT	527	
Veteran's Services	186	
Law	1,291	
Retirement	405	
Health	3,406	
Elections	721	
Traffic & Parking	3,124	
OSPCD	6,782	
Communications	932	
Personnel	624	
Recreation	721	
Department Workspace Subtotal	30,316	
Other Function Spaces		
Customer Service	1,393	Calculation for peak traffic
Board of Alderman	3,150	Info from HMFM study
Vault Storage	2,511	20,084 cubic feet
Archives	4,500	Possible separate building
Television studios	4,500	Two studios
Meeting rooms	10,845	Calculation based on most efficient use
Lobby	3,000	
Staff Facilities	6,000	
Other Function Spaces Subtotal	35,899	
TOTAL*	66,215	

TABLE 1. BUILDING PROGRAM SUMMARY

Library	SF	
Entrance/lobby	2,100	
Meeting room circulation	500	
Circulation work space	2,200	
Technical services	2,000	
Children's Seating	3,000	
Adult Seating	2,000	
Computer lab	3,000	
Admin. Offices	1,047	

Library	SF	
Staff lounge	500	
Young Adult Seating	2,000	
Collections	15,000	
Workspace Subtotal	33,347	
Patron Circulation	+35%	
TOTAL	45,018	

School Administration	SF	
Offices	13,314	
Classroom space	5,000	
TOTAL*	18,314	

DPW	SF	
Office	5,500	
Garage	35,000	
Storage	30,000	
TOTAL*	70,500	

POLICE	SF	
Station	46,000	
EOC	5,000	
TOTAL*	51,000	

FIRE	SF	
Administration and Prevention	5,805	
Station No. 3	15,000	
TOTAL*	20,805	

TOTAL CITY BUILDING PROGRAM	SF	
TOTAL PROGRAM	269,419	

VEHICLE INVENTORY	COUNT	
TOTAL CITY VEHICLES**	242	

Notes:

*Internal circulation included in calculations

** All City vehicles do not need parking facilities constructed and are indicated here as information from the department survey.







Building Program Components

City Hall Offices

The City Hall Office Component includes the City departments which are located at the current City Hall, the City Hall Annex, the Council on Aging, the Recreation Department, the Traffic and Parking Department, and the Inspectional Services Division of the Office of Strategic Planning and Community Development. This component contains the City's principal administrative departments. Co-location of these departments can create efficiencies through shared resources and improved operations resulting from department and division adjacencies. Additionally, this component can better service Somerville residents by dramatically improving the convenient accessibility of constituent services.

Somerville Cable Access Television (SCAT) is listed in this area, although, as an independent organization it can elect to relocate to a separate space. Should SCAT remain within the City facilities, efficiencies could occur with the City's Communications Department.

Library

The Library Component consists of an expanded and redesigned central public library for the City of Somerville. A significant amount of additional space is required for the Somerville Library system to effectively serve the City's residents. Furthermore the space must be flexible enough to support multiple types of activities, most specifically is the increase demand for digital media. The Library building program is detailed further in the Library Building Program section of this report.

School Administration

The School Administration Component contains a series of programs and divisions within the Somerville School Department, which are currently dispersed throughout the City in various schools and public and private properties. Centralizing these divisions and programs creates the opportunity for overall internal department efficiencies.

Department of Public Works

The Department of Public Works Component contains all of the Department of Public Works divisions, the Public Works vehicle garage space, and yard storage area, for such items as road salt. While the office functions of this component are compatible with other City components, the yard and garage activities are less desirable elements for full integration with most other components.

Public Safety

The Public Safety Component includes the Somerville Police Department's central headquarters, the Somerville Fire Departments Administrative and Fire Prevention offices and an Emergency Command Center. Co-locating these offices will create operation efficiencies for public safety services. Due to the specific nature of this component and purpose it serves, special construction and security measures are

required that prevent full integration with other City components. An opportunity is available for grant funds to support the Emergency Command or Operations Center element in this facility or some. Federal Department of Homeland Security funds have been previously available for up to \$1,000,000 to put towards construction.

Engine 3, Union Square Fire Station

The Engine 3, Union Square Fire Station Component serves the specific and unique purpose of emergency response to the Union Square area of Somerville. The location of this component will be determined by the emergency response times for the Union Square area which it serves. Due to the specific nature of this component and purpose it serves, special construction and security measures are required that prevent full integration with other City components.

Locational Principles

In analyzing how Somerville can plan for its existing and future space needs, several principles were established and used to develop the different building components. These principles include relationships and communications, efficiencies, and customer service.

Relationships and Communications

If a consolidated City Hall was created, department personnel would be in regular communication with other personnel from their own department and with other departments. Appendix B suggests where the strongest lines of communication are expected because of the needs of each department to access information from other departments in order to effectively serve the community and perform their department's mission.

Further, in a new office building the ability to communicate could be greatly enhanced through use of the currently available wired and wireless technologies. Near-term future technology is expected to provide even further enhancements in real time communication. Consequently, the organization of spaces on a floor and in physical closeness to another will be based on more focused criteria, including the need for unique support facilities, such as a vault, or the need to link entrances to the most commonly used facilities, such as public meeting rooms, payment windows, and other constituent services.

Efficiencies

The principal area, in which the listed components of City departments, divisions and programs create efficiencies, after standardizing office workspaces, are in higher utilization of shared resources and improved operations due to department adjacencies. Building program efficiencies realize the greatest gains through shared resources. The primary areas where shared resources can result in significant space savings are meeting spaces, file storage, record management, and constituent services.





Meeting Space

The City of Somerville requires meeting space for its fifty-seven departments and divisions to hold regularly scheduled operational meetings as well as other meetings that are unscheduled. Additionally, the City of Somerville also requires meeting space for the thirty-two municipal committees, boards, authorities and commissions that serve the community. Optimizing the utilization of meeting spaces to serve these ninety-three different municipal entities is essential to developing an efficient, yet effective space program for Somerville's municipal functions.

As determined by this study's space programming the City requires 10,845 square feet of dedicated meeting space [*see Table 2: Meeting Demand and Space Estimate*]. This meeting space will be divided between department meeting rooms, small meeting rooms, medium sized meeting rooms and a large meeting space or auditorium for large internal and public meetings. The amount of required meeting room space was calculated by using the data collected by municipal department surveys and provided by municipal staff.

The meeting space can be categorized as serving two different purposes. First, the small, medium and large sized meeting roomed designated to accommodate the regular meetings of the City's official authorities, boards, commissions and committees and municipal department meetings. The second type of meeting spaces are small meeting rooms dedicated to each municipal department for the purpose of accommodating meetings that do not follow a set schedule or a predictable rotation, such as once a week or twice a month. These types of small meetings, which occur on an unscheduled basis, are also intended to be accommodated in the manager and executive level modular office systems recommended by this report.

TABLE 2. MEETING DEMAND AND SPACE ESTIMATE

Meeting Rooms	Total		
Daytime Meeting Rooms	18		
Evening Meeting Rooms	11		
TOTAL	29		



MEETING ROOM PROGRAM

Meeting Size	Number of Rooms	Capacity	Total Capacity	Area/person (SF)	Total SF
Large	1	250	250	7	1,750
Medium	5	50	250	17	4,250
Small	5	25	125	17	2,125
Department	16	10	160	17	2,720
TOTAL			785		10,845

On a monthly basis this will result in:

Approximately 73 hours of unused daytime meeting space. (Not including department spaces)

Approximately 17 evenings with unused meeting space.

Records Management

The creation and implementing of a comprehensive record management policy for all City departments that aims to reduce file storage in individual and departmental offices in favor of a managed centralized system that is accessible to all municipal departments can be a critical tool in achieving space efficiencies as well as improved municipal operations. The construction of a centralized municipal facility which would consolidate the majority of the City's administrative departments provides a specific opportunity to implement such a record management strategy as well as the physical resources to reinforce this policy.

File Storage

The City's file storage policy should appropriately protect these City resources and make them accessible for municipal needs. It should include:

- Acceptable methods for file storage;
- Required condition of the storage facilities;
- Dedicated management of the file storage system.

The policy should conform to State regulations pertaining to file storage. File storage is regulated under MGL Chapter 66, s.11 with regulations promulgated by the Massachusetts Supervisor of Public Records. These regulations determine which files must be stored and for how long, as well as, the manner in which the various types of files must be stored, including physical requirements such as air circulation and fire protection. An appropriate municipal file storage policy would conform to State regulations, maximize electronic file storage and third party file storage options, and use a dedicated municipal facility that manages long term file storage and City archives. The City of Somerville completed a study; *Archives & Records Management Report* by Inlook Group, which made specific recommendations for upgrading file storage and electronic file systems.

Customer Service

Consolidation of a large number municipal departments and divisions in a single dedicated facility presents the opportunity for significant improvements to customer service in addition to operational efficiencies realized by combining the resources required for constituent services. At present, customers are often required to visit more than one City building to have their needs met. For example, a building permit applicant may need to visit City Hall, Franey Road, and the Fire Prevention Offices in Union Square (prior to their relocation to Franey Road) for a small project. This creates frustration and extends the time needed for community members to complete relatively simple tasks that involve the City.

In terms of space efficiencies, waiting areas and public counters that are required by many municipal departments to interact with and provide services to constituents could be consolidated or co-located. The amalgamation of these resources through the design process could result in significant space efficiencies as well as improved service to Somerville residents. These potential shared resources efficiencies can be further capitalized on if a centralized municipal building also included or abutted the central library. In this situation, the two components could be designed to share resources. Small municipal meeting rooms accessible to the library could be used as study rooms in off business hours, function space and facilities could support both components and municipal file storage facilities could be shared or incorporated with the Library services. These opportunities should be fully explored in the facility design processes as they advance.

Section 5: LIBRARY BUILDING PROGRAM

Library Building Program

The City Library provides a wide range of services to the public, services that will become more important as the Library links businesses and residents to the expanding resources and information that comes with the digital age. The Central Library is considered in depth in this study because funds have already been provided by the State to advance the program, and because of the Library's potential to:

- Initiate the overall building improvement program and the implementation strategy developed in this study. This is because the Library has been approved for state funds through the State Library Commission's program for design and construction of new and renovated library facilities [605 CMR 6.00];
- Provide additional efficiencies and greater services when combined as a program with other city functions;
- Support the revitalization of a city economic center, by creating additional activity in the area where it is located.

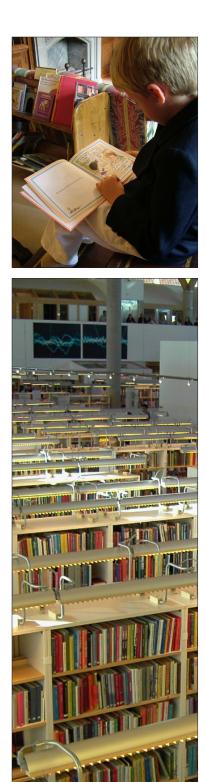
In September of 1995, library staff wrote a building program and hired Shepley Bulfinch Richardson and Abbot to design an addition and renovation of the existing Central Library facility, and in April of 1996, with the approval of the Mayor and Board of Alderman, applied for state grant funding. Funding of \$3,258,000 was awarded, but a new mayoral administration found that the plan for bonding \$10 million was not fiscally feasible at the time. A review of the construction drawings produced by Shepley Bulfinch Richardson and Abbot for this project has been completed for this study and is included in Appendix C.

The proposed building space program in this study is based on previous library programs, from 2005 and 2008, and analysis of a recommended municipal facilities scenario. The recommended municipal facilities scenario includes most of the general government offices, or City Hall, combined with a new Central Library on a parcel of land yet to be determined. A goal of the combined government office and library building facility is to take advantage of options for shared spaces to reduce total building construction costs. The options to reduce the total program include such elements as sharing of meeting and public function spaces. In addition, cost reductions could be provided by sharing certain site development design and construction costs, building and utility system design and construction costs, and sharing of operation and maintenance costs.









Central Library Needs Assessment

The Central Library currently holds approximately 163,000 books and print serials and 22,000 non-print items (such as videos and compact disks) in tightly fitting shelves. The current standard for a collection for a city the size of Somerville is +/-300,000. The staff weeds the collection aggressively on a regular basis to maintain some space for new items.

The Library has a similar space shortage relative to patron seating. Although the standard for seating in a community Somerville's size is 196, the Library currently has 140. The children's room has only 23 seats. Seating is such a premium in both the Children's Room and the adult reading room after school that some students sit in alcoves on the floor in order to work together when all the seating is taken. The introduction of eighteen Internet access computers, computers for word processing, and computers for a public access catalog has made a crowded floor plan even more difficult to maneuver.

Meeting and program space is equally tight. The Central Library organizes between 20 and 30 programs a month, with outside groups also using the Auditorium. There is a story hour area in the Children's Department that seats approximately 25 children. Story hours and puppet shows that the children's librarians organize are held in this area. Crafts and other activities are done at the four tables in the main children's area, meaning that anyone wanting to work at these tables is displaced. The only other meeting or program area in the Library is the small Auditorium with a capacity of 75 people. (75 is the capacity that was established in 1975. Using the building code standard of 1 seat per 10 square feet plus 20%, the capacity is just 52.) Larger children's programs and all adult programs are held in this Auditorium. It routinely is filled to capacity and often overflowing.

Handicapped accessibility is only partial. While the front doors and the public restrooms are now accessible, the passageways between many areas of shelving are too narrow for wheelchairs. There is no sprinkler system in the building, though there is a fire alarm system.

This space problem is exacerbated by the increased use of the Library over the last 15 years and the increasingly diverse needs of the community. The Library system circulated 378,000 items in Fiscal Year 2008, up from approximately 334,000 items in Fiscal Year 2000. Library staff has been aggressive in its programming for preschool and school-age children, and is now trying to reach out to teens with, among other things, a My Space page, and the adult population, particularly immigrants, with ESL classes now held weekly in all three library locations.

It is expected that library use will continue to increase, along with the demand for new and different types of resources. The Audio-Visual collection has seen phenomenal growth in the last fifteen years. It now accounts for 12% of Library's materials and 38% of the Library's circulation; and this collection, under a new department head, is currently undergoing a stringent weeding of old materials and the addition of many more new and popular materials. The Library has been aggressive in buying foreign language and English-as-a-Second-Language materials, and their use has increased proportionately. Lastly, but perhaps most importantly, is the impact of the computer age on the Library. Access to the Internet and to software packages such as word processing and spreadsheets account for an increasing number of visits to the Library. We can only make an educated guess at the impact that new technology will have on libraries as the 21st century progresses. Thus, much flexibility has to be built into the spaces in a new library building.

Planning standards for the size of libraries have changed recently according to the expected utilization of a library as a central repository and access point for information. Currently the Somerville Library System has a total of 42,500 square feet; 29,000 at the Central, and 13,500 for the branches – the East Branch is 3,000, the West Branch is 10,500. Standard is 0.6 sf/capita. Recently library planners have recently pushed for 1.0 sf/capita standard. At present, the Somerville Library System's 42,500 sf is approximately 0.55 sf/capita. As illustrated in Table 3 the total recommended program for the Central Library is 45,018 sf., Increasing the Central Library by approximately 16,000 sf will increase the Somerville Library System's sf per capital to 0.76 sf.

Vision for a New Central Library for Somerville

TABLE 3. LIBRARY SPACE CALCULATIONS

Current Location	Current SF	Current SF/ Capita
Central Library	29,000	
East Branch	3,000	
West Branch	10,500	
Current TOTAL	42,500	.55
Proposed Location	Proposed SF	Proposed SF/ Capita
New Central Library	45,018	
East Branch	3,000	
West Branch	10,500	
Proposed TOTAL	58,518	.76

The new Central Library for Somerville will be a library of the 21st century. It will engage its users with both traditional and innovative services and collections, embrace the technology and materials delivery protocols of today, and adaptable to new types of materials delivery and services that develop as the 21st century progresses.

The Library will be a prominent source of pride and inspiration for the citizens of Somerville, functioning both as a destination and as the community and cultural anchor for the city, where people of all ages and from all backgrounds can meet, discover, and learn. There will be special areas for children, teens and New Americans.

Featuring physical layouts that are intuitive to all users, the library will encourage self-service and independent use. There will be numerous seating and meeting options, including space for casual individual use and impromptu gatherings, quiet study space, and formal meetings and presentations. Spaces will be shared, flexible and easily adaptable to change, and will be wired for technology-enhanced presentations, broadcasts and personal computer use anywhere in the building Amenities for patrons will be an integral part of the design.

The Library's collection of books, periodicals, audio-visual materials, and online databases will contain a breadth and depth of materials suitable to the diverse population of Somerville and available free of charge to all residents of the City. The Library will also offer state-of-the-art technology workstations, from which patrons can access the Internet, download materials and files, and create personal documents and other products.







Meeting space for formal meetings and presentations and various comfortable seating options makes the library a desirable and state-of-the-art community destination.

Exciting programs, many aimed at specific user groups such as children and immigrant communities, will engage people in public debate and community dialogue. Interesting exhibits will inspire and delight the imagination, and will showcase the work of local artists. Nonprofit organizations, local government agencies and others will be welcome to use the meeting and conference rooms.

The Central Library will embody the civic values of Somerville and will enable a sense of wonder, expectation and discovery in the people of the city, as well as offering them a practical community center at which to gather, meet, work and study. The Library will encourage and express the richness of Somerville's public, cultural, and intellectual life in an accessible, adaptable, and attractive facility that will provide all amenities for a comfortable and enjoyable library experience.

There are several priorities for a new Central Library:

- Provide shelving for the target collection of 225,000 volumes of books, 40,000 non-print items and 100 print periodical subscriptions 20 years from now (by that time most periodicals will be delivered in electronic format);
- Provide adequate seating in various configurations for approximately 200 people in the building at any one time. Ample and comfortable seating should be given a priority because the Library should be a "destination" and a place to spend time productively and pleasantly and in a community setting;
- Create separate areas for children and teens;
- Include patron amenities, such as a café, lockers and a gift shop;
- Provide ample workspace for staff and amenities for their comfort so that they can do their jobs efficiently and adequately in a pleasant and supportive environment;
- Provide a large auditorium with projection and broadcast equipment as well as a variety of smaller meeting and gathering spaces with an array of seating configurations;
- Provide a state-of-the-art telecommunications system that will use Wi-Fi throughout the building and provide other applications that are standard at the time of design implementation;
- Facilitate marketing and display of materials;
- Provide easily-accessible parking;
- Create a building that will be easily adaptable to change in the future.

In considering options for a new Central Library facility, especially one that was adjacent to a consolidated City Hall, the Somerville Library Planning Committee has made the following additional recommendations:

Physical Plant and Function

- Consolidate spaces on as few floors as possible if part of a common building and create a major presence on the first floor to minimize staffing and to create a dynamic interaction with the public;
- Structure patron flow from the door and into the functional areas of the library in an intuitive and inviting manner;

- Design function space to minimize public service staff to four direct service points at most: reference, children's services, technology support, and circulation services;
- Meet patron circulation needs through self-service kiosks and points of service with fewer staff-mediated transactions;
- Have a large open space that supports displays and presentations, encourages ad hoc social interaction, and unifies the library's multiple functions;
- Target adolescents and young adult populations by interacting access to digital media and technology with spaces for social interaction;
- Possess a high degree of flexibility in the design of the public space with an ability to change layouts rapidly to meet changing needs and patron demands and changes in the nature of library materials and service;
- Be built out of focused user spaces (e.g., world languages or young adult services) that are integrated with particular collections.

Technology

- Overall building design needs to be not only capable of meeting the current technological demands of library patrons but also flexible enough to adopt new technology as it evolves over the next several decades.
- Provide approximately 69 public computer stations in a new central library to meet national standards that call for 1 public access computer for every 1,000 city residents.
- Digital access to library resources needs to permeate all elements of the built environment via Wi-Fi and other rapid access digital technologies.
- A centralized technological area supporting public access computers, digital media, and digital video and sound processing kiosks needs to have a clear and obvious presence.

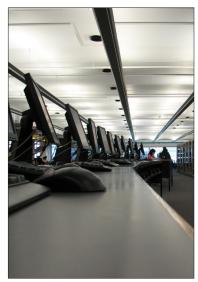
Central Library: Program as a Combined Facilities Scenario

The total recommended program for the Central Library is 42,858 sf, to accommodate the building elements listed in Table 1. This program was developed according to a scenario where the Central Library is combined with City Hall offices as one building complex on a single site. The goals for this project would be:

- *Project Savings* Obtain cost savings associated with a combined facility and sharing of building spaces and elements (see below);
- *Improved Service Delivery* By co-locating these civic facilities, public resources and support provided by all the government functions included in the complex may support each other in service delivery.
- *Increased Accessibility* With a location adjacent to public transit and major streets, both facilities could be provided with improved public accessibility. Within the building complex, the design could also accommodate universal access.
- *Sustainable Design* Design both facilities as a single complex with the building systems and building design improved with sustainable building and site



Auditorium space will be designed for multiple functions and will be a central meeting space for both City Hall and the Library



National standards call for 1 public access computer for every 1,000 residents.

design criteria. Promote green building and educate people about the benefits by example.

- *Supporting activities* To improve the urban vitality of the block and street activity where the combined facilities are located, commercial uses and private activities such as retail spaces and food service may be included in the final building program. While these uses are not included in the proposed Building Program, they are proposed for the final design of the combined building complex.
- Shared Spaces and Building Elements The proposed combined program proposes the following shared spaces and building elements, including constructionrelated efficiencies:
 - <u>Design and bid documents</u> The design of the building and building systems can be included within the same set of contract documents and building specifications for bidding.
 - <u>Meeting rooms</u> Meeting rooms are proposed within shared spaces accessible to both the Library and City Hall and sized for multiple, concurrent meetings controlled by a scheduler. Separate card-key locking systems will allow controlled accessibility from either the general city offices or the library spaces into the meeting and function rooms.
 - <u>Auditorium</u> The auditorium space will be designed for multiple functions and will be a central meeting space for the City Hall and Library functions. Through sharing the space and managing its use, more efficient use of the auditorium is proposed.
 - <u>Building circulation</u> Certain elements of the building accessibility may be shared. However, because of the need for the unique security requirements for the uses, this may be limited to non-public areas.
 - <u>Loading and deliveries</u> The loading and delivery areas for the users could be combined at one location, with the proper security.
 - <u>Mechanical systems</u> Within a combined building, certain elements of the HVAC may be shared providing a cost savings.
 - <u>Operation and maintenance</u> Reduce the costs of operation and maintenance with combined and connected building systems. Maintenance staffing efficiencies could be considered as well.
 - <u>Outreach and information interface</u> Public outreach and information could be centralized or shared between the City Hall and Library. The proximity will also allow redirection to appropriate offices and resources within the complex.
 - <u>Parking</u> Parking will be provided according to the zoning regulations and the program goals. The combination of the City Hall and Library with other commercial uses within the same site or block will allow sharing of parking spaces.

Descriptions of the Library Areas included in the program summary and General Design Requirements are included in Appendix C.

Section 6: CONSTRUCTION COST ESTIMATES

New or Replacement Construction Cost Estimates

While this plan does not advocate for wholesale new construction of municipal facilities, understanding the costs of different types of facilities will be helpful for decision-making in the City as the policy makers decide how to move forward. Please note: These are planning estimates that will need to be updated in the final building program for determining development costs.

Construction costs estimates were determined by building type on a per square foot basis through examining comparable municipal facilities and consultations with professional cost estimators. The space programming calculations are summarized in Table 1 and the New Construction Cost Estimates (Table 4). Additional costs were calculated for design and legal costs (12% of construction), furniture, fixtures and equipment (7%), and a contingency fund of 10%, to determine the total costs.

<u>City Hall</u>

The City Hall Office Component primarily includes administrative municipal departments for which office space is the most appropriate building type. Based on the space programming calculation completed in earlier phases of this study the City Hall Office Component projects to be approximately 66,215 square feet of total building program. With 347 employees projected, this would be equivalent to 212 square feet per employee. At an estimated cost of \$215 per square foot, the cost of new construction would be approximately \$14,200,000, for a total of \$18,000,000 including other costs.

Library

The Library Component is composed of library uses which possess a unique building type. Based on the space programming calculation completed in earlier phases of this study the Library Component projects to be approximately 45,018 square feet of total building program. At an estimated cost of \$285 per square foot, the cost of new construction would be approximately \$12,800,000, for a total of \$16,500,000 including all other costs.

School Administration

The School Administration Component primarily includes administrative municipal offices for which office space is the most appropriate building type. Based on the space programming calculation completed in earlier phases of this study the School

City Hall Offices		
Space 66,215 sf		
Construction per/sf	\$215	\$14,236,225
Design and legal	12%	\$1,708,347
FF&E	7%	\$996,536
Contingency	10%	\$1,423,623
TOTAL		\$18,364,730
Library		
Space 45,018 sf		
Construction per/sf	\$285	\$12,830,130
Design and legal	12%	\$1,539,616
FF&E	7%	\$898,109
Contingency	10%	\$1,283,013
TOTAL		\$16,550,868
School Administration		
Space 18,314 sf		
Construction per/sf	\$215	\$3,937,510
Design and legal	12%	\$472,501
FF&E	7%	\$275,626
Contingency	10%	\$393,751
TOTAL		\$5,079,388
Police		
Space 51,000 sf		
Construction per/sf	\$245	\$12,495,000
Design and legal	12%	\$1,499,400
FF&E	7%	\$874,650
Contingency	10%	\$1,249,500
TOTAL		\$16,118,550
DPW		
Space 5,500 sf		
Construction per/sf	\$215	\$1,182,500
Design and legal	12%	\$141,900
FF&E	7%	\$82,775
Contingency	10%	\$118,250
SUBTOTAL		\$1,525,425
Garage space 35,000 sf		
Construction per/sf	\$200	\$7,000,000
Design and legal	12%	\$840,000
FF&E	7%	\$490,000

Contingency

SUBTOTAL

\$700,000

\$9,030,000

10%

DPW (continued)				
Storage space 30,000 sf				
Construction per/sf	\$50	\$1,500,000		
Design and legal	12%	\$180,000		
FF&E	7%	\$105,000		
Contingency	10%	\$150,000		
SUBTOTAL		\$1,935,000		
SF TOTAL (DPW)		70,500 sf		
CONSTRUCTION COST TOTAL		\$9,682,500		

Fire Department				
Fire Station No. 3 15,000 sf				
Construction per/sf	\$250	\$3,750,000		
Design and legal	12%	\$450,000		
FF&E	7%	\$262,500		
Contingency	10%	\$375,000		
SUBTOTAL		\$4,837,500		
Fire Admin. and Prevention 5,805 sf				
Construction per/sf	\$215	\$1,248,075		
Design and legal	12%	\$149,769		
FF&E	7%	\$87,365		
Contingency	10%	\$124,808		
SUBTOTAL		\$1,610,017		
SF TOTAL (Fire)		20,805 sf		
CONSTRUCTION COST TOTAL		\$4,998,075		

Administration Component projects to be approximately 18,314 square feet of total building program. At an estimated cost of \$215 per square foot, the cost of new construction would be approximately \$3,900,000, for a total of \$5,000,000 including all other costs.

Department of Public Work

The Department of Public Works Component primarily includes administrative municipal offices as well as specialty vehicular maintenance, work and storage spaces. Based on the space programming calculation completed in earlier phases of this study the Department of Public Works Component projects to be approximately 70,500 square feet of total building program, of which 5,500 square feet is office, 35,000 is garage/workspaces, and 30,000 is storage. With replacement construction cost of approximately \$215 per square foot for office (\$1,200,000), \$200 per square foot for garage space (\$7,000,000), and \$50 per square foot for improvement of storage space (\$1500,000 for drainage controls, lighting, etc), the cost of new construction is \$9,700,000, with a combined total of \$12,500,000 with all other costs.

Public Safety

The Public Safety Component is comprised of uses which are a unique building type. Based on the space programming calculation completed Feasibility Study for the Police and Fire Departments, by DiMarinisa & Wolf, the Public Safety Component projects to be approximately 46,000 square feet for Police, 5,805 square feet for Fire Department Administration and Fire Prevention Offices and 5,000 for a City Emergency Operations Center for a total building program of 56,805 square feet and a construction cost of approximately \$13,700,000, for a combined total of \$17,700,000 with all other costs.

Fire Station No. 3

The Engine 3, Union Square Fire Station Component is comprised of uses which are a unique building type. Based on the space programming calculation completed in Feasibility Study for the Police and Fire Departments, by DiMarinisa & Wolf the Engine 3, Union Square Fire Station Component projects are approximately 15,000 square feet of building program. With an estimated construction cost of approximately \$250 per square foot the cost of new construction is \$3,750,000, for a total of \$4,800,000 with all other costs.

Section 7: SITE ANALYSIS

Site Analysis

An analysis of potential sites for new consolidated City offices was conducted using the building program as determined by the department space needs analysis, while taking into account the potential operational efficiencies that had been identified. Sites were evaluated individually and in groupings to determine the locations that best served the functions of the municipal offices, the needs of constituents, and provided the highest positive development impact for the City of Somerville. Individual sites were assessed based on their capacity to support municipal uses. Site scenarios were assessed based on their overall impact for the municipal departments and the City as a whole.

Site Assessments

The following nine sites were identified by City staff for assessment as possible locations for municipal uses. The sites were evaluated based on key characteristics such as size and zoning and analyzed based on sitting criteria such as compatibility with surrounding areas, proximity to public transportation, amount of private property acquisition, and the potential economic impact on adjacent areas. The key site characteristics were provided by the Office of Strategic Planning and Community Development and the siting criteria determined with input from this same office. A matrix of the site assessments is attached as Appendix E. The sites evaluated include:

Public Safety Block

The Public Safety Block site is located between Somerville Avenue, Washington Street, Prospect Street and Merriam Street. The site contains several private and City owned properties and is the current location of the existing Somerville Public Safety building, which houses the Somerville Police Department and elements of the Somerville Fire Department. The site contains approximately 110,000 SF of gross land. This site is zoned as both Transit Oriented District 70 (TOD 70) and Corridor Commercial District 55 (CCD 55). The Somerville Zoning Ordinance Article 6.5 A states "Transit Oriented Districts encourage mixed-use transit-oriented development with well-designed pedestrian access near transit connections and commercial squares." And the Corridor Commercial District 55 provides for mixed use or commercial development at a mid-rise scale. 80,184 sf of this site is zoned as TOD 70

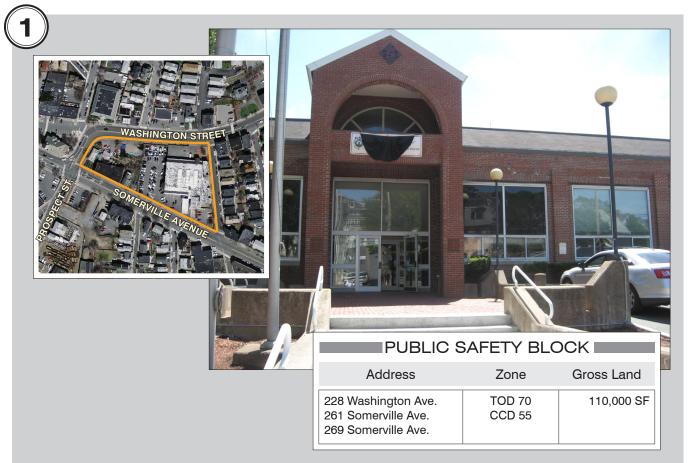


FIGURE 5 | SITES FOR EVALUATION: PUBLIC SAFETY BLOCK

and 30,513 sf of this site is zoned as CCD 55. TOD 70 zoning regulations allows for a Floor Area Ratio of 3.5 and a maximum building height of 55 ft resulting in a maximum of 280,644 gross building sf. Transit Oriented Districts offer a green building incentive, which would increase the Floor Area Ratio to 4 and the maximum building height to 70 ft, resulting in a maximum of 320,736 gross building sf. CCD 55 zoning regulations allow for a Floor Area Ratio of 3 and a maximum building height of 55 ft resulting in a maximum of 91,540 gross building sf. The maximum gross building allowed on this site for a green building is 412,275 sf. This site will have excellent accessibility to public transportation due to the proposed Green Line extension. The site will be located approximately 0.2 miles away from the proposed Union Square Green Line station, 0.3 miles away from the proposed Washington Street Green Line station and 0.6 miles away from the proposed Gilman Square Green Line station.

The maximum gross building possible for this site, coupled with the proximity to the proposed Union Square Green Line station, makes this location a viable option for several municipal components. Municipal uses would be compatible with residential, retail and commercial uses in the surrounding area and are consistent with the municipal uses currently located on the site in the Public Safety building. The high visibility of this location, the proximity to the proposed Green Line extension, the volume of municipal uses that can be located here and the redevelopment potential

of nearby properties are factors that would contribute to creating a significant positive economic impact on the surrounding area, if municipal uses were located at this site. Locating municipal uses at this site would also provide an activity and foot traffic generator for the area businesses. The municipal building program would not utilize the entire potential building capacity on the site, so potential exists for private construction to occur adjacent to the municipal facility. In addition to supporting existing businesses, this site's prominent location within Union Square and proximity to larger underutilized properties has considerable potential to act as a catalyst for other private large-scale redevelopment projects.

Kiley Barrel Site

The Kiley Barrel site is located at the corner of Somerville Avenue and Prospect Street and extends to Milk Place and Bennett Street. The site contains several properties, both City owned and privately owned. The site contains approximately 42,945 SF of gross land. This site is zoned Transit Oriented District 100 (TOD 100). The Somerville Zoning Ordinance Article 6.5 A states "Transit Oriented Districts encourage mixed-use transit-oriented development with well-designed pedestrian access near transit connections and commercial squares." The zoning regulations allow for a Floor



FIGURE 6 | SITES FOR EVALUATION: KILEY BARREL SITE

Area Ratio of 3.5 and a maximum building height of 85 ft resulting in a maximum of 150,308 gross building sf. Transit Oriented Districts offers a green building incentive, which would increase the Floor Area Ratio to 4 and the maximum building height to 100 ft, resulting in a maximum of 171,780 gross building sf. This site will have excellent accessibility to public transportation due to the proposed Green Line extension. The site will be located approximately 0.1 miles away from the proposed Union Square Green Line station, 0.4 miles away from the proposed Washington Street Green Line station and 0.6 miles away from the proposed Gilman Square Green Line station.

The potential size of the maximum gross building possible for this site, coupled with the proximity to the proposed Union Square Green Line station, makes this location a viable option for several municipal components. Municipal uses would be compatible with residential, retail and commercial uses in the surrounding area and is consistent with the municipal uses currently located in the public safety building at 255 Somerville Avenue. The recommended building program would not utilize the entire potential building capacity on this site, however, due to the fact that the site would only likely have one building tower, it is less likely that private development (other than ground floor retail) could occur in conjunction with a municipal facility on this site. Due to the site's previous and current use, some level of environmental remediation should be expected. The high visibility of this location, the proximity to the proposed Green Line extension, the volume of municipal uses that can be located here and the redevelopment potential of nearby properties are factors that would contribute to creating a significant positive economic impact on the surrounding area, if municipal uses were located at this site. Locating municipal uses at this site would provide an activity and foot traffic generator for the area business. In addition to supporting existing businesses, this site's prominent location within Union Square and proximity to larger underutilized properties has considerable potential to act as a catalyst for other private large scale redevelopment projects.

Homans Building Site

The Homans Building site is located at 350 Medford Street. The building and the property it occupies are owned by the City of Somerville. The property is located at the corner of Medford and School Streets in close proximity to the current City Hall and High School. The site contains approximately 48,296 sf of gross land. The site is zoned as Business District A (BA), which provides for business areas located on main thoroughfares that are attractive to a wide range of commercial uses. The zoning regulations allow for a Floor Area Ratio of 2 and a maximum building height of 50 ft resulting in a maximum of 96,592 gross building sf. This site will have excellent accessibility to public transportation due to the proposed Green Line extension. The location of the proposed Gilman Square Green Line station is on the property directly to the southeast of the Homans Building site. The site will be immediately adjacent to the proposed Gilman Square Green Line station and 0.7 miles away from the proposed Lowell Street Green Line station.

The size of this site could accommodate a single or possible multiple municipal components. Municipal uses would be highly compatible with residential and commercial uses in the surrounding area. Due to the built out condition, small parcel size of the surrounding area, and the fact that municipal uses have traditionally been located in this area, locating municipal uses at this site would generate limited private economic development on the adjacent and surrounding properties. The expected benefits of the close proximity to the current City Hall, High School and Library properties are severely reduced due to a considerable grade change and the rail line located between the properties. The existing building is currently not in use. The building evaluation completed by HMFH in *The Municipal Property Comprehensive Consolidation Plan* determined the building should be demolished and new construction to occur on the site due to the extensive renovations required for the existing building to be reused. Due to the need for new construction and the abutting proposed Gilman Square Green Line station, this site could be a valuable private redevelopment property for the City as a Transit Oriented Development project.

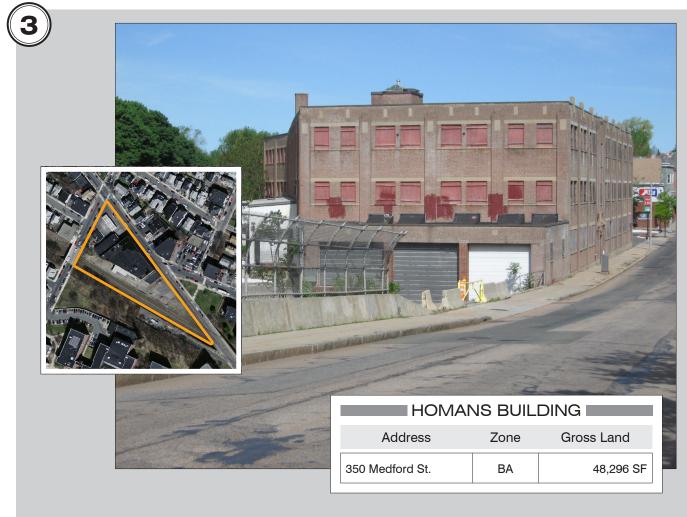


FIGURE 7 | SITES FOR EVALUATION: HOMANS BUILDING

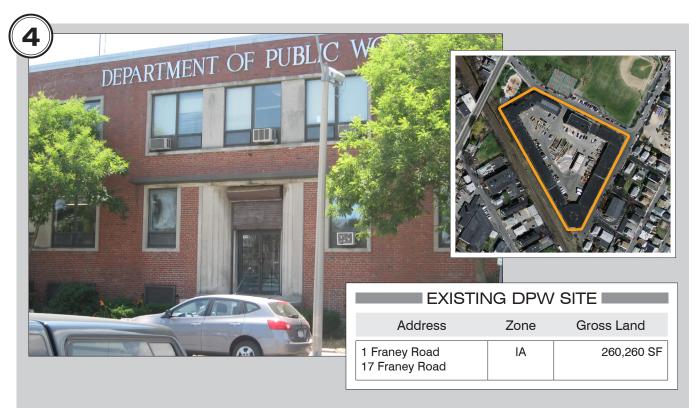


FIGURE 8 | SITES FOR EVALUATION: EXISTING DPW SITE

Existing DPW Site

The existing Department of Public Works (DPW) facility is located in a single complex at 1 Franey Road and 17 Franey Road. The building and the property it occupies are owned by the City of Somerville. The property is centrally located off Broadway, adjacent to Trum Field. The site contains approximately 260,260 sf of gross land and is zoned as Industrial District A (IA), which allows for industrial and related and supporting uses. The zoning regulations provide for a Floor Area Ratio of 2 and a maximum building height of 50 ft, resulting in a maximum of 520,520 gross building sf. This site has good access to public transportation. In addition to numerous MBTA bus routes along Broadway, the closest rail stops are approximately 0.4 miles away at the proposed Lowell Street Green Line station and 0.4 miles away at the proposed Ball Square Green Line station.

The considerable size of this site makes it a viable option for the location of several municipal components. Municipal uses would be highly compatible with residential and commercial uses in the surrounding area. Due to the site's current use, some level of environmental remediation should be expected. As a result of the built out condition and small parcel size of the surrounding area, and the fact that municipal uses have traditionally been located in this area, locating municipal uses at this site would generate limited private economic development on the adjacent and surrounding properties. The Department of Public Works is well served by this site's central location and is mostly compatible with the surrounding uses. Consolidating municipal services at this location would most likely dictate the relocation of the Department of Public Works facility, which would require issues of site acquisition, consistent level of service and use compatibility to be addressed.

10 Poplar Street

The 10 Poplar Street site is the current location of the Somerville Waste Transfer facility and exists in the Brickbottom section of Somerville. This site is a combination of two parcels, both owned by the City of Somerville. The site contains approximately 91,616 sf of gross land and is zoned as Industrial District A (IA), which allow for industrial and related and supporting uses. The zoning regulations provides for a Floor Area Ratio of 2 and a maximum building height of 50 ft, resulting in a maximum of 183,232 gross building sf. This site will have very good accessibility to public transportation due to the proposed Green Line extension. The site will be approximately located 0.3 miles away from the proposed Washington Street Green Line station and 0.6 miles away from the proposed Union Square Green Line station.

The considerable size of this site makes it a viable option for the location of several municipal components. Municipal uses would have compatibility with this area. The elimination of the Waste Transfer Facility and the construction of a municipal building could act as a catalyst to stimulate investment in the surrounding area's industrial properties and start a neighborhood reinvestment. The recommended building program will not utilize the entire development capacity for the site and potential exists for private development to occur above or adjacent to a municipal facility. This potential is increased if the site is rezoned for some level of transit oriented development in anticipation of the upcoming Green Line Station. Due to the site's current use, some level of environmental remediation should be expected. McGrath Highway provides high automobile access to the site, but also creates a visually unappealing barrier for the site. However, this site could be an important and valuable mixed use public/ private redevelopment property for the City.

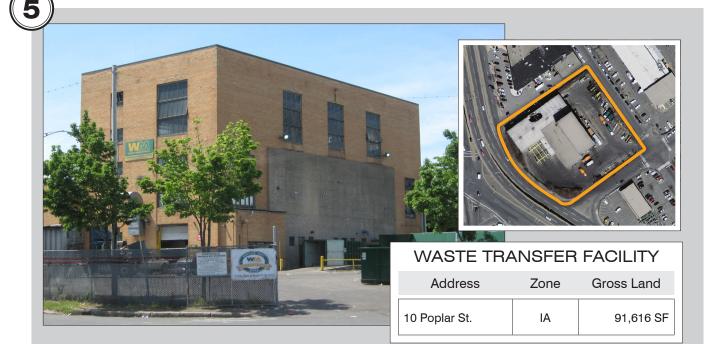


FIGURE 9 | SITES FOR EVALUATION: WASTE TRANSFER FACILITY

165 Linwood Street

The site is located at 165 Linwood Street and is the current location of two private businesses, Pat's Auto and a U-Haul vehicle rental facility. The site is in the Brickbottom section of Somerville. The privately owned site contains approximately 40,985 sf of gross land and is zoned as Industrial District a (IA), which allows for industrial and related and supporting uses. The zoning regulations provide for a Floor Area Ratio of 2 and a maximum building height of 50 ft, resulting in a maximum of 76,788 gross building sf. This site will have very good accessibility to public transportation due to the proposed Green Line extension. The site will be approximately located 0.2 miles away from the proposed Washington Street Green Line station and 0.5 miles away from the proposed Union Square Green Line station.

The size of this site could accommodate a single or possibly multiple municipal components. Municipal uses would have compatibility with this area and limited economic impact would be expected due to the industrial uses currently existing in the surrounding area. Due to the site's current use, some level of environmental remediation should be expected. McGrath Highway provides high automobile access to the site, but also creates a visually unappealing barrier for the site. Depending on redevelopment plans for the Brickbottom section of Somerville and the future of McGrath Highway, this site could be an important location for future private redevelopment.

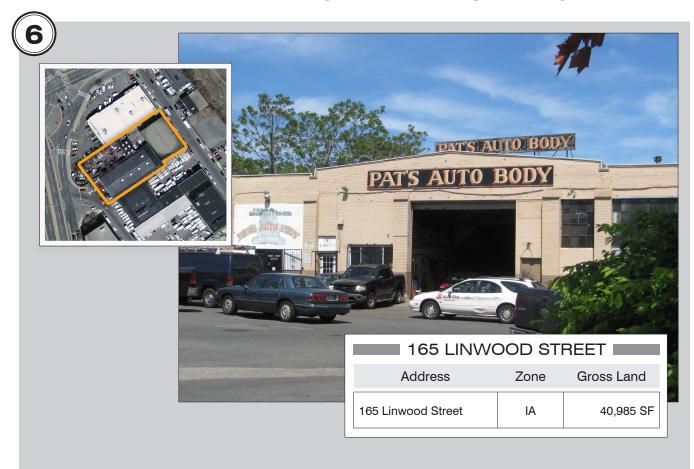


FIGURE 10 | SITES FOR EVALUATION: 165 LINWOOD STREET

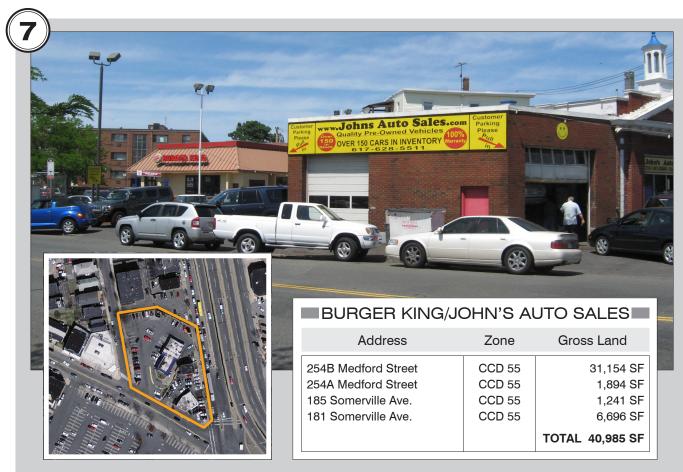


FIGURE 11 | SITES FOR EVALUATION: BURGER KING/JOHN'S AUTO SALES

185-181 Somerville Ave

The site is located at 185 -181 Somerville Avenue and is the current location of two private businesses, John's Auto Sales and a Burger King restaurant and two other parcels. The privately owned site is zoned as a Corridor Commercial District 55 (CCD 55) property, which provides for mixed use or commercial development at a midrise scale. The zoning regulations allow for a Floor Area Ratio of 3 and a maximum building height of 55 ft resulting in a maximum of 122,955 gross building sf. This site will have very good accessibility to public transportation due to the proposed Green Line extension. The site will be approximately located 0.3 miles away from the proposed Washington Street Green Line station and 0.3 miles away from the proposed Union Square Green Line station.

Municipal uses would be compatible with residential and retail uses in the surrounding area. McGrath Highway provides high automobile access to the site, but also creates a visually unappealing barrier for the site. Due to the size limitations of the site and built out condition, locating municipal uses at this site would generate limited private economic development on the adjacent and surrounding properties. Depending on redevelopment plans for the Brickbottom section of Somerville and the future of McGrath Highway, this site could be an important location for future private redevelopment.



FIGURE 12 | SITES FOR EVALUATION: 515 SOMERVILLE AVENUE

515 Somerville Ave

The site is located at 515 Somerville Ave and is a currently a vacant property. The privately owned site contains approximately 46,852 sf of gross land and is zoned as Commercial District (BA), which provides for business areas located on main thoroughfares that are attractive to a wide range of commercial uses. The zoning regulations allow for a Floor Area Ratio of 2 and a maximum building height of 50 ft resulting in a maximum of 93,704 gross building sf. This site has moderate to low levels of access to public transportation. Although there are MBTA bus routes along Somerville Ave, the closest rail stops are approximately 0.9 miles away at the proposed Gilman Square Green Line station, 0.9 miles away at the proposed Lowell Street Green Line station, and 0.8 miles away at the proposed Union Square Green Line station.

The size of this site could accommodate a single or possibly multiple municipal components. The site is centrally located within the city and possesses moderate automobile and bus accessibility. Municipal uses would be compatible with residential and retail uses in the surrounding area. Due to the built out condition and small parcel size of the surrounding area, locating municipal uses at this site would generate limited private economic development on the adjacent and surrounding properties.

North Point Property

The North Point Property site is located in the south east end of the City of Somerville, directly abutting the City of Cambridge. Currently, it does not have a street address, but is generally located near the intersection of Water Street and Monsignor O'Brien Highway. The privately owned site contains approximately 222,156 sf of gross land. The site is zoned as Industrial District B (IB), which provides areas for necessary industrial and related uses of such a nature that they require isolation from many other kinds of land uses. The zoning regulations allow for a Floor Area Ratio of 2 and a maximum building height of 50 ft resulting in a maximum of 444,312 gross building sf. This site will have a moderate to good level of access to public transportation due to the proposed Green Line extension. The current Lechmere Station is located approximately 0.4 miles from the North Point Property Site, however as part of the proposed Green Line extension, the station will be relocated to the north side of McGrath Highway and will be even closer to this site. Additionally, the site will be located approximately 1.0 mile away from the proposed Washington Street Green Line station.

The considerable size of this site makes it a viable option for the location for several municipal components, with ample room for additional development. Municipal uses would have low compatibility with the industrial uses currently allowed for this area by the Somerville's zoning regulations. Although McGrath Highway provides automobile access to the site and the Lechmere Green Line station provides good public transportation access, this site is not considered accessible to residents because it is not centrally located within the city nor is it close to any existing residential neighborhoods. Depending on redevelopment plans for the Brickbottom section of Somerville and the North Point area, this site could present a highly valuable private redevelopment opportunity for the City, particularly given the size of the property.

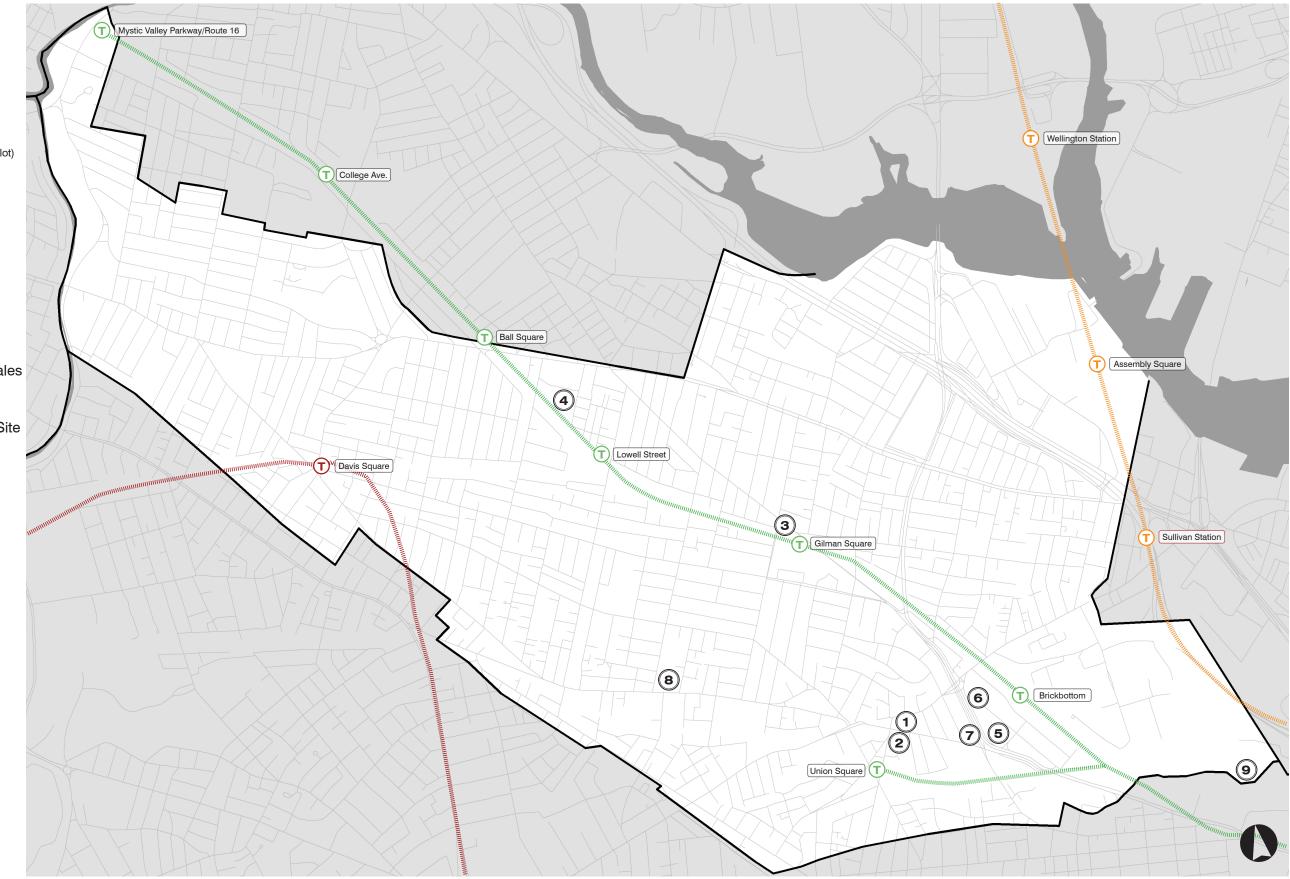


FIGURE 13 | SITES FOR EVALUATION: NORTH POINT PROPERTY

56 | SITE ANALYSIS

FIGURE 14 | SITES FOR EVALUATION

- Public Safety Block
 228 Washington Avenue
 261 Somerville Avenue
 269 Somerville Avenue
- Kiley Barrel Site
 20-30 Prospect Street
 258 and 264–266 Somerville Avenue
 4,9 and 10 Milk Place
 8,14 and 16–20 Bennett Street
 0 Prospect Street (city owned parking lot)
- Homans Building 350 Medford Street
- DPW's Existing Site
 1 Franey Road
- Waste Transfer Facility
 10 Poplar Street
- Pat's Auto/U-Haul 165 Linwood Street
- Burger King/John's Auto Sales
 185 Somerville Avenue
 181 Somerville Avenue
- Vacant Somerville Avenue Site
 515 Somerville Avenue
- North Point Property
 No address (MBL: 117-A-2 and 117-A-3)



58 | SITE ANALYSIS

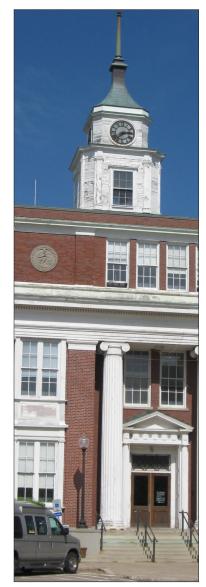
Section 8: SITE SCENARIO ASSESSMENTS

Four site scenarios were developed by the Cecil Group and the Office of Strategic Planning and Community Development for assessment as possible combined locations for municipal uses. Each scenario is comprised of a combination of the sites selected for assessment. The site scenarios were evaluated based on the individual characteristics of each site as well as the overall combined municipal efficiencies and positive civic impacts of their collective locations. Site plan diagrams were developed for each site within the scenarios to examine the potential development layouts. Those diagrams are listed as Figures 15–22 in this section of the report. A matrix of the site scenario assessments is attached as Appendix F. The successful elements of these assets were taken forward and revised in the final recommendations.

Three component locations are consistent throughout all scenarios, the School Administration component, the Engine 3, Union Square Fire Station component, and the Department of Public Works. In all scenarios the School Administration component will occupy the current City Hall building at 93 Highland Avenue. Consolidating the School Administration offices and specified school department programs together in this location achieves several efficiencies. First, the consolidation of departments into a single facility creates management and resource efficiencies between departments and programs. Secondly, by locating the School Administrative component at 93 Highland Avenue a public education cluster is created with the existing Somerville High School, School Administration and specific School Department offices and programs. Third, by occupying the current City Hall building, a facility's efficiency is created by reusing an existing building that requires minor renovation and is an iconic and historical civic structure.

In all scenarios Engine 3, Union Square Fire Station is located at either 181-185 Somerville Avenue or 515 Somerville Avenue. The siting of this station will be determined by data not available at the time of this study. The principal deciding factors, in addition to cost, in the location of this fire station will be the response time to the surrounding areas and a policy determination whether or not to consolidate this station with the Engine 4, Lowell Street Fire Station. Depending on each of these factors Engine 3, Union Square Fire Station can be located at either 181-185 Somerville Avenue or 515 Somerville Avenue in any of the following scenarios. Both locations provide the opportunity for mixed use public/private redevelopment in conjunction with the construction of the Fire Station. If the 181-185 Somerville Avenue scenario is selected, signalization improvements will be made underneath McGrath Highway to ensure the smooth flow of emergency vehicles from the site to Washington Street.









If McGrath Highway is ultimately converted into a boulevard, the new design should take into account the needs of emergency vehicles.

In all scenarios the Department of Public Works (DPW) remains at its current location, 1 Franey Road. Maintaining the current location for the DPW facility is the recommended option for several reasons. First, while the DPW facility site is a viable location, it is not preferred for municipal offices due the limited economic development effects. Secondly, the site's central location, configuration and facility serve the DPW well. Third, relocation of the DPW would most likely require property acquisition and potentially raise compatibility issues with the surrounding areas and most likely result in a site not centrally located within the city. Under the recommended building program, additional space will be made available within the existing DPW facility with the relocation of Inspectional Services and Fire Prevention offices together with the centralization of record storage. This space will enable expansion or reallocation for the offices currently within the facility.

Union Square Scenario (Alternative #1)

The Union Square Scenario locates the City Hall and Library components at the Public Safety Block site and the Public Safety components at 10 Poplar Street, the current site of the Somerville Waste Transfer facility, as shown in Figure 16. In this scenario, the entire Public Safety Block will be redeveloped and contain two principal buildings, a building of private development and a municipal building that houses the consolidated City Hall and Library components. The conceptual development plan for the Public Safety Block in this scenario is illustrated in Figure 17. The site contains an open space plaza at the corner of Prospect Street, Washington Street and Somerville Avenue, a pedestrian walkway between the two buildings as an extension of Columbus Avenue, and underground parking capacity.

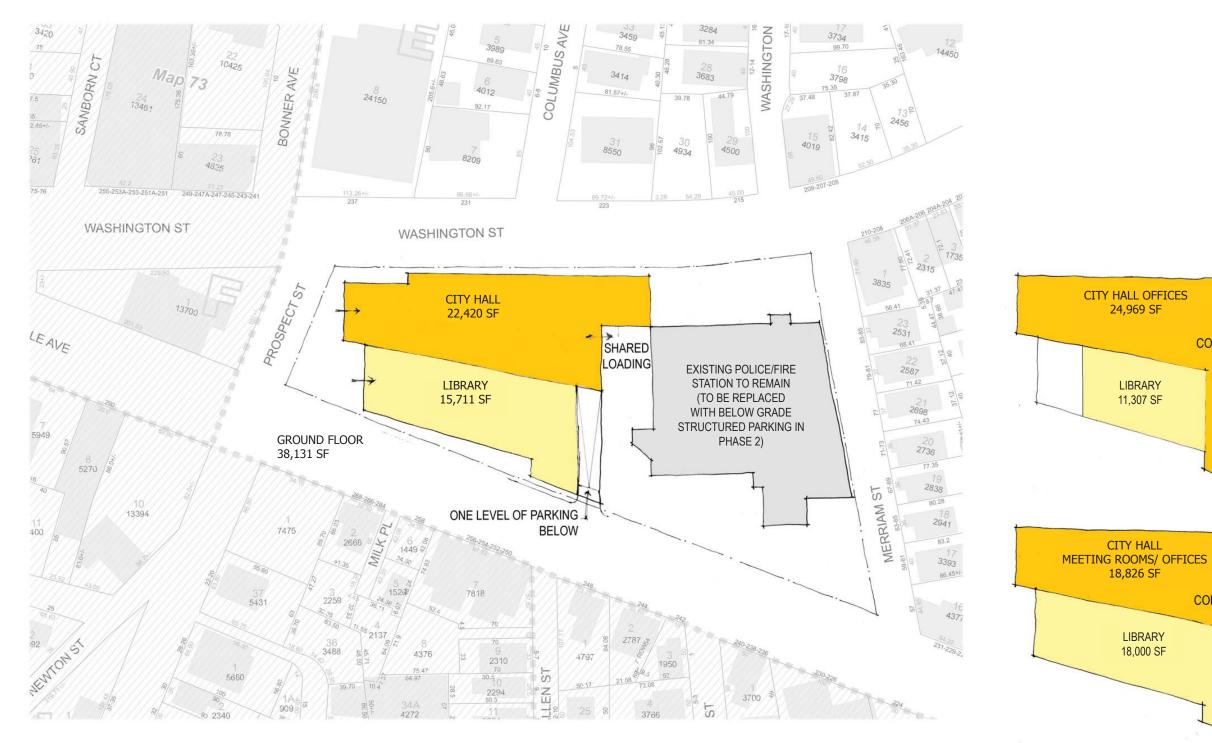
The first of the two buildings located on the site is envisioned as a municipal building of two distinct elements: the Library and the City Hall offices. The municipal building would be located across Washington Street from the existing Post Office, which is up for disposition and can potentially be converted into a public performance space, creating another civic/cultural use to enliven the area. Development potential exists for construction of a second building consisting of approximately 100,000 sf of private office and ground floor retail to be built adjacent to the City Hall/Library. To facilitate this concept and allow for construction of the private office building, a total of 22,585 sf of privately owned land will need to be acquired.

This conceptual development plan will possess close proximity to public transit, in the proposed Green Line extension and provides a prominent location in one of the City's most prominent centers. The Union Square Scenario will act as an economic and activity generator and catalyst. The approximately 360 City employees and 1,200 average daily visitors drawn to the City Hall and Library have the opportunity to boost the existing businesses in Union Square. Additionally new development of this scale in this prominent location will act as a catalyst for other major development opportunities in Union Square. The Kiley Barrel site would be better suited for pri-

FIGURE 15 | UNION SQUARE SCENARIO (ALTERNATIVE 1)



FIGURE 16 | UNION SQUARE SCENARIO 1 SITE ASSESSMENT







LIBRARY 18,000 SF





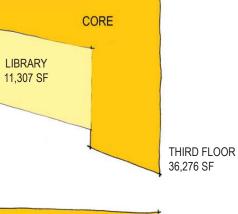








SECOND FLOOR 36,826 SF



CORE

vate development given its proximity to the proposed Green Line station and zoning regulations which encourage high development densities on this site. The conceptual development plan presented in Figure 17 requires 121 parking spaces to serve the municipal components at this site, per the Somerville Zoning Regulations and 95 parking spaces to serve the Public Safety component located at 10 Poplar Street.

In the Union Square Scenario, the Public Safety component will be located at the 10 Poplar Street site, the current site of the Waste Transfer Facility. This property is owned by the City of Somerville and has room to support both the Public Safety components and private development at this site. Under the existing zoning, the maximum additional square footage that could be added to this site is approximately 126,000 sf. If that amount of private development could be built on the site it would increase the City's tax base and mitigate any fiscal impacts of relocating the Waste Transfer Facility. If the property was up-zoned, the private development opportunity and fiscal benefit would increase. The economic impacts of the Public Safety components on this area are expected to be minimal at this time due to the industrial nature of the surrounding sites. However, the combination of the Public Safety components with private development has the potential to transform this area.

The Union Square Scenario creates the potential for significant economic impacts and municipal services improvements in the City, by pursuing multiple joint private public developments in critical City locations by leveraging City owned property. In the Union Square Scenario both the Public Safety Block and the 10 Poplar Street sites, which are City owned properties, are envisioned to include some level of private development, which will defray the development costs of the municipal facilities, increase the City's commercial tax base and limits the property acquisition process. Additionally, this scenario preserves sites such as the Kiley Barrel site and Homans Building site for private development. Finally, the Union Square Scenario presents ideal locations and opportunities for the municipal components, specifically the City Hall and Library. The Public Safety Block site provides a prominent location in one of the City's most important business and residential centers and offers the space to create a highly functional and enduring element of the Somerville cityscape, which can serve and inspire the City.

Union Square Alternative Scenario (Alternative #2)

The Union Square Alternative Scenario locates the City Hall and Library components at the Kiley Barrel site and the Public Safety components to the 10 Poplar Street site, as shown in Figure 18. In this scenario the Kiley Barrel site would be redeveloped to host a singular building containing the consolidated City Hall and Library components as well as ground floor retail space. The conceptual development plan for the Kiley Barrel site in this scenario is illustrated in Figure 19. The development at this location would act as a gateway feature for both vehicular traffic traveling west toward Union Square on Somerville Avenue and for pedestrian traffic emanating from the proposed Union Square Green Line station on Prospect Street.

This conceptual development plan possesses close proximity to future public transit in the proposed Green Line extension and provides a prominent location in one of





the City's most consequential city centers. The Union Square Alternative Scenario will act as an economic and activity generator and catalyst. The approximately 360 City employees and 1,200 average daily visitors drawn to the City Hall and Library have the opportunity to boost the existing businesses in Union Square. Additionally, new development of this scale in this prominent location will act as a catalyst for other major development opportunities in Union Square. In this scenario, the City-owned portion of the public safety site would be vacant due to the relocation of the Public Safety component and available for the City to direct its redevelopment. The conceptual development plan presented in Figure 19 requires 121 parking spaces to serve the municipal components located at this site, per the Somerville Zoning Regulations and 95 parking spaces to serve the Public Safety component located at 10 Poplar Street.

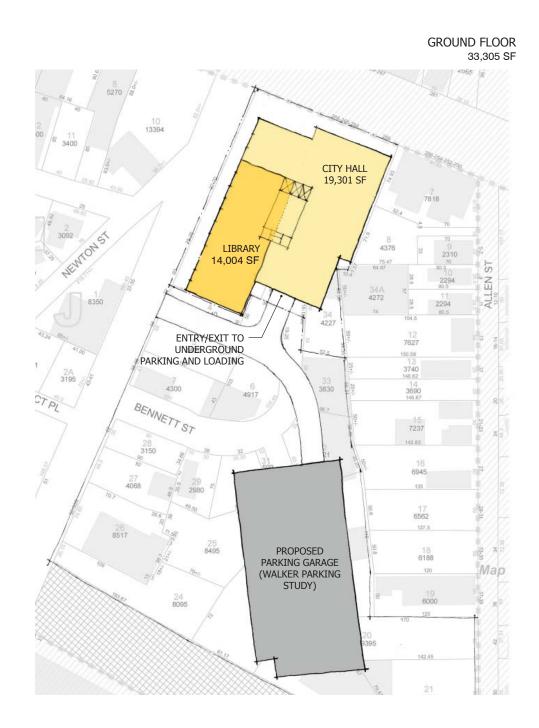
In the Union Square Alternative Scenario, the Public Safety component will be located at the 10 Poplar Street site, the current site of the Waste Transfer Facility. This property is owned by the City of Somerville and has room to support both the Public Safety components and private development at this site. Under the existing zoning, the maximum additional square footage that could be added to this site is approximately 126,000 sf. If that amount of private development could be built on the site it would increase the City's tax base and mitigate any fiscal impacts of relocating the Waste Transfer Facility. If the property was up-zoned, the private development opportunity and fiscal benefit would increase. The economic impacts of the Public Safety components on this area are expected to be minimal at this time due to the industrial nature of the surrounding sites. However, the combination of the Public Safety components with private development has the potential to transform this area.

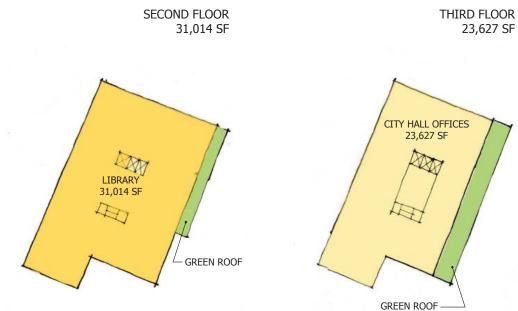
The Union Square Scenario Alternative creates the potential for economic impacts and municipal services improvements in the City, by pursuing multiple joint private public developments in critical City locations by leveraging City owned property. In the Union Square Alternative Scenario, many of the same objectives are achieved as in the Union Square Scenario; the utilization of City owned properties and the positioning of private development on other parcels. By including the City Hall and Library components in the development plans for the Kiley Barrel site and relocating the Public Safety component to the 10 Poplar Street site, a significant development opportunity for the City is presented in the then vacant City owned property on the Public Safety Block. Although the City's property does not encompass the entire Public Safety Block site, the City can pursue private development plans. However, this site is less desirable than Alternative 1 site because constraints make creating a highly functional and meaningful civic space difficult at this location. Further, the municipal facility will not utilize the full development potential of the site and it is unlikely that a private tenant can be found for a few floors of what is otherwise a City Hall. Additionally, approximately 13,300 sf of privately owned land will need to be acquired for this scenario to be realized.

FIGURE 17 | UNION SQUARE ALTERNATIVE SCENARIO (ALTERNATIVE #2)



FIGURE 18 | UNION SQUARE ALTERNATIVE SCENARIO 2 SITE ASSESSMENT





A R R O W S T R E E T

Architecture SCALE: 1" = 100' Urban Design 24 SEPTEMBER, 2010 Planning 09034 Graphics and Interiors



SOMERVILLE SITE ASSESSMENT STUDIES UNION SQUARE ALTERNATIVE SCENARIO



FOURTH FLOOR 23,287 SF





CITY HALL: 66,215 SF LIBRARY: 45,018 SF

TOTAL SF: 111,233 SF

The Cecil Group, Inc. • Arrowstreet

Homans Building Scenario (Alternative #3)

The Homans Building Scenario locates the City Hall and Library components at the Homans Building site and the Public Safety components to Public Safety Block site, as shown in Figure 22. In this scenario, a new municipal building would be constructed at the Homans Building site to house the City Hall and Library components and a new building designed for the Public Safety components would be constructed in place of the current public safety building at 228 Washington Avenue. The conceptual development plan for the Homans Building site in this scenario is illustrated in Figure 23. The total building program for the City Hall and Library components is 108,800 square feet, which is a greater volume than what is currently permissible at the Homan Building site. To locate both of these components at this location, the total building program would have to be reduced by approximately 12,000 square feet or a zoning variance would need to be sought for relief. In both of these alternatives the property will be nearly entirely consumed by the building required for the City Hall and Library components. Some open space or plaza could be provided in the property area adjacent to the proposed Gilman Square Green Line station. In accordance with the Somerville Zoning Regulations, the conceptual development plan as presented in Figure 23 requires 181 parking spaces to serve the municipal components at this site. The site's required parking will be located under the building.

In this scenario the City Hall and Library components will possess direct proximity to public transit, in the adjacent proposed Gilman Square Green Line station. Despite the proposed Green Line station, the relocation of these municipal components to the Homans Building site is not expected to generate either a high level of activity or spur economic development in the surrounding area. This is due to the nearly built out residential environment of the surrounding area, the barriers created by the rail line, and because these municipal uses are not new to the area.

In the Homans Building Scenario, the Public Safety component will be located at 228 Washington Avenue, the current site of the City's Public Safety Building. Although this property is owned by the City of Somerville, constructing a new Public Safety Building at this location will require the temporary relocation of the public safety components currently located on the property. While this municipal use will be compatible with the surrounding areas, the continuation of the current environment should not be expected to generate economic development opportunities.

The Homans Building Scenario maintains the municipal components very close to their current locations, if not in their current locations, and eliminates property acquisition by utilizing property currently controlled by the City of Somerville. However, this scenario provides minimal economic impact from either the properties being developed or those being vacated. Nor do the sites involved in this scenario enhance the function of the municipal components that are proposed for them.

FIGURE 19 | HOMANS BUILDING SCENARIO (ALTERNATIVE #3)



FIGURE 20 | HOMANS BUILDING SCENARIO 3 SITE ASSESSMENT



NOTE: BUILDING COMPONENT PROGRAMS REDUCED TO CONFORM WITH EXISTING ZONING.

A R R O W S T R E E T SOMERVILLE SITE ASSESSMENT STUDIES Architecture SCALE: 1" = 80' The Cecil Group Urban Design HOMANS BUILDING SCENARIO 24 SEPTEMBER, 2010 Planning and Design Planning 09034 Graphics and Interiors



CITY HALL: 61,250 SF LIBRARY: 35,342 SF

TOTAL SF: 96,592 SF

Poplar Street Scenario (Alternative #4)

The Poplar Street Scenario locates the City Hall, Library and Public Safety components at 10 Poplar Street, currently the site of the Somerville Waste Transfer facility in the Brickbottom section of Somerville, as shown in Figure 24. In this scenario, the entire 10 Poplar Street site will be redeveloped into a single municipal building containing the Public Safety components, the consolidated City Hall offices and Library components. The conceptual development plan for the 10 Poplar Street site in this scenario is illustrated in Figure 25. In addition to the municipal building, limited surface parking and landscaping would occupy the site. Due to the significant building program that is accumulated by locating these municipal components in a singular building, no space will be available for retail or private office space within this combined municipal facility. In accordance with the Somerville Zoning Regulations the municipal components at this site would require 276 parking spaces necessitating an underground parking structure as illustrated in Figure 25.

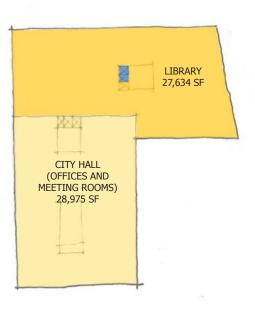
In this scenario, the municipal facility will possess high automobile and public transit accessibility. The closest proposed Green Line station to the site will be the Washington Street station, located approximately 0.3 miles from the site. The site is owned by the City of Somerville, which eliminates site acquisition and creates private development opportunities on other City owned properties. Despite of the approximately 500 city employees and 1,310 average daily visitors drawn to the City Hall, Library and Public Safety offices, the industrial nature of the surrounding areas will receive little economic impact. A municipal facility of this size at this location could be used as an anchor for a Brickbottom neighborhood redevelopment plan. However, it is reasonable to expect that a successful Brickbottom neighborhood redevelopment plan will not require a municipal facility of this size as an anchor.

FIGURE 21 | POPLAR STREET SCENARIO (ALTERNATIVE #4)



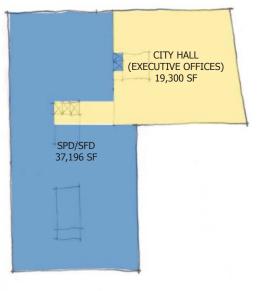
FIGURE 22 | POPLAR STREET SCENARIO 4 SITE ASSESSMENT





SECOND FLOOR 56,609 SF





THIRD FLOOR 56,496 SF



CITY HALL: 66 SPD/SFD: 56 LIBRARY: 45

66,215 SF 56,805 SF 45,018 SF

TOTAL SF: 168,038 SF

Section 9: RECOMMENDATIONS

The recommended municipal facilities scenario presented here is based on the analysis of municipal department space needs, the resulting building program, and a testing of that program on the list of potential sites presented for examination as part of this study.

The Recommended Scenario

The Recommended Scenario for the City of Somerville's Municipal Facilities Master Plan includes the following major components:

- Locates the City Hall and library components at the Public Safety Block site in Union Square; and
- Moves the Public Safety building components to other sites including 10 Poplar Street, the site of the Somerville Waste Transfer facility.

In this scenario, the entire Public Safety Block will be redeveloped and contain two principal buildings, a building of private development and a municipal building that houses the consolidated City Hall and Library components. The conceptual development plan for the Public Safety Block in this scenario is illustrated in Figure 23–25.

In this concept, the site contains an open space plaza at the corner of Prospect Street, Washington Street, and Somerville Avenue, a pedestrian walkway between the two buildings as an extension of Columbus Avenue, and parking supplied in structured parking facilities. The first of the two buildings located on the site is envisioned as a municipal building of two distinct elements: the library and the City Hall offices. The municipal building would be located across Washington Street from the existing Post Office, which has the potential to be reutilized as a performance space, creating another multiple use civic venue to enliven the area. The second building is anticipated to be office space or other market-based option, also with retail stores at the street level.

This conceptual development plan will provide close proximity to public transit from the proposed Green Line extension and utilize a prominent location in one of the City's most dynamic centers. The Recommended Scenario at Union Square will act as an activity generator and economic catalyst. The approximately 360 City employees and 1,200 average daily visitors drawn to the City Hall and Library have the opportunity to boost the existing businesses in Union Square. Additionally, new development of this scale in this prominent location will encourage other investment and development opportunities in Union Square. Other plans have identified private redevelopment opportunities and parking facilities to support the development. The conceptual development plan presented in Figure 25 requires 125 parking spaces to serve the municipal components at the Union Square site, and 95 parking spaces to serve the Public Safety component located at 10 Poplar Street, in accordance with the Somerville Zoning Regulations for parking. In this scenario, the City could elect to build a second level of underground parking to serve general parking needs in the area which would add approximately 200 more spaces. These spaces could be funded in part, by the City's existing Payment in Lieu of Parking program in effect in the CCD-55 District in Union Square.

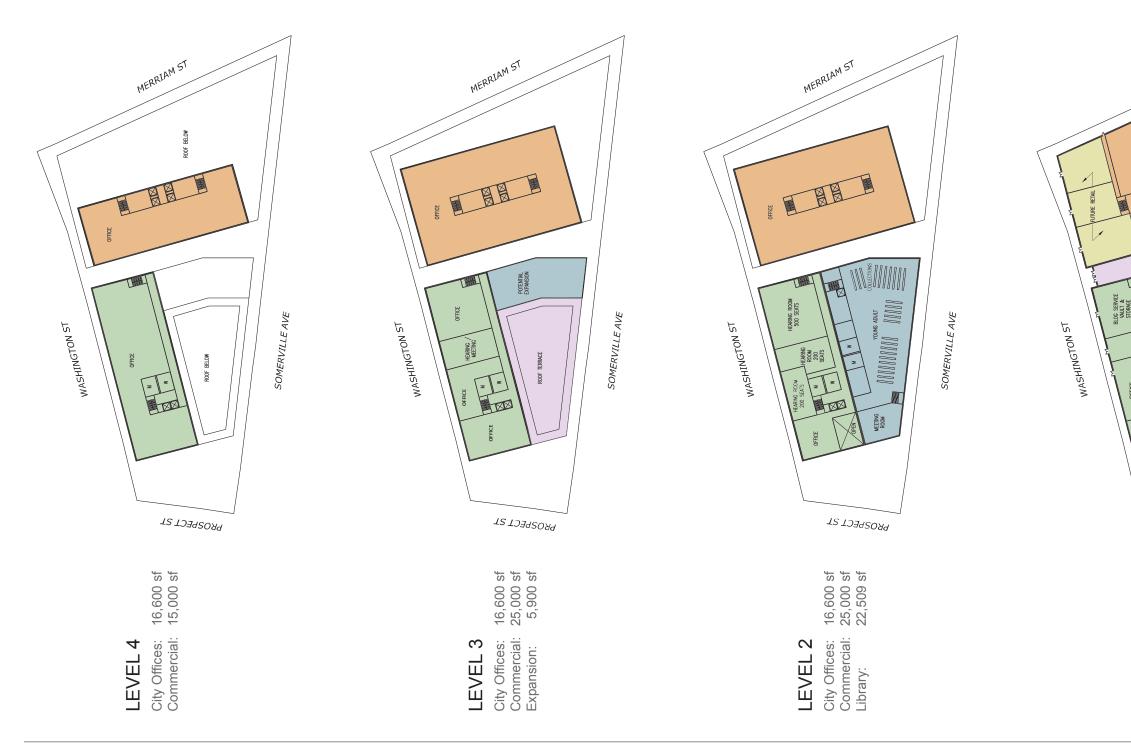
In the Union Square Scenario, the Public Safety component will be located at the 10 Poplar Street site, the current site of the Waste Transfer Facility. This property is owned by the City of Somerville and has room to support both components of the Public Safety facility and private development. The impacts of the Public Safety components on this area are expected to be minimal at this time due to the industrial nature of the surrounding neighborhood but would be an investment in the long-term planning for the area. The most significant expected impacts will be a higher perception of public safety in the vicinity. However, as noted above, the site would have capacity to add approximately 126,000 sf of private development under the current zoning, a figure that would be increased if the property was rezoned for transit oriented development.

Overall Facilities Recommendations

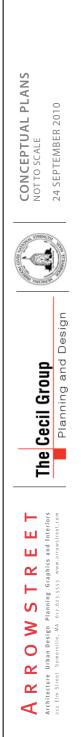
The scenario recommended here is based on the analysis of the building program and potential sites presented for this study. The scenario evaluations also took into account the multiple values in siting City offices together in locations where their presence would generate economic activity. The major elements of the Recommended Scenario are:

- The relocation and construction of a new Public Safety building to replace the existing problematic building. The Public Safety Building would include the Somerville Police Department Headquarters, the Somerville Fire Department Administrative Offices and the offices of the Somerville Fire Department Fire Prevention unit.
- The construction of a new City Hall, which consolidates the general government offices (City Hall, City Hall Annex and other offices) and the Central Branch of the library in Union Square at the location of the existing Public Safety building. Note that under this scenario the public safety building could remain in place until an alternate facility had been built and the private market was ready for a new office/retail in its place.
- Relocating the School Administration offices and certain School Department programs, which are in separate and leased spaces, to the current City Hall, thus creating an educational campus with Somerville High School.
- Upgrading existing municipal buildings and properties, if they continued to be utilized for municipal department purposes.

The Recommended Scenario centralizes many municipal departments which are currently dispersed throughout the City in a primary centralized facility. This con-



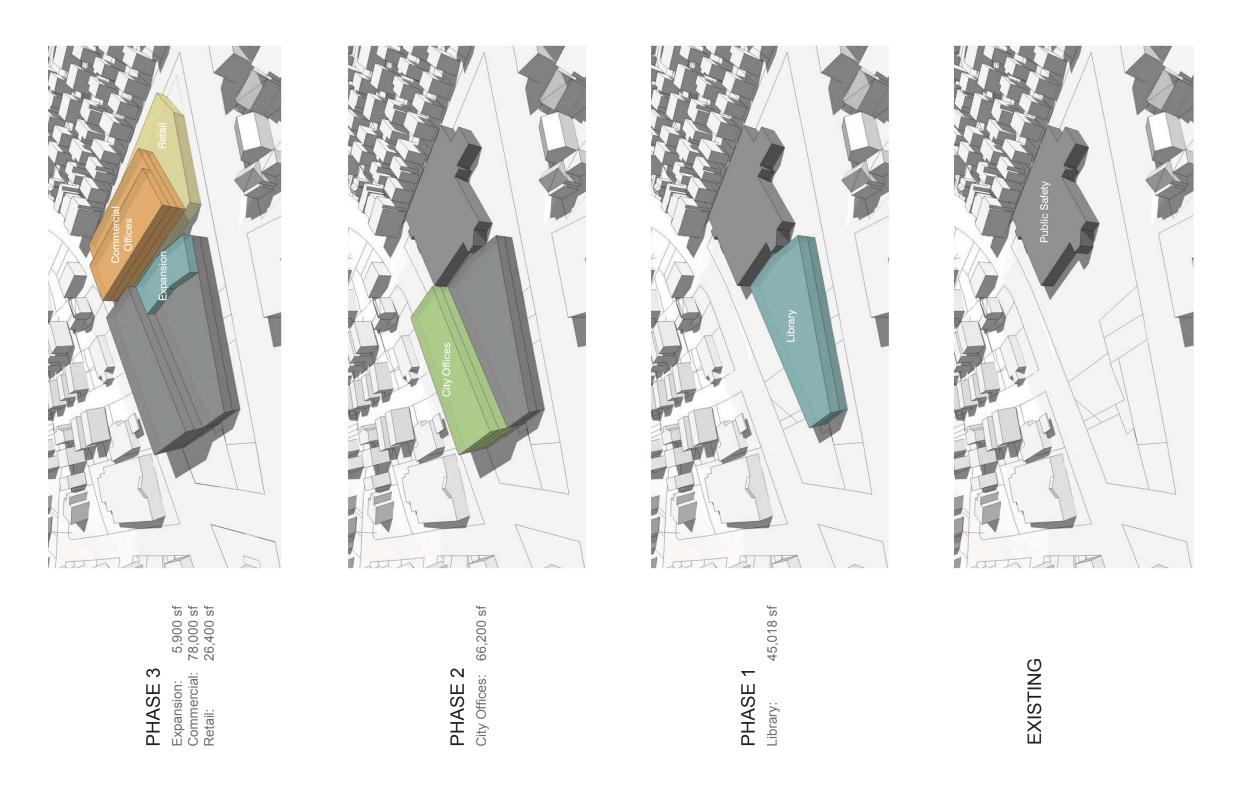




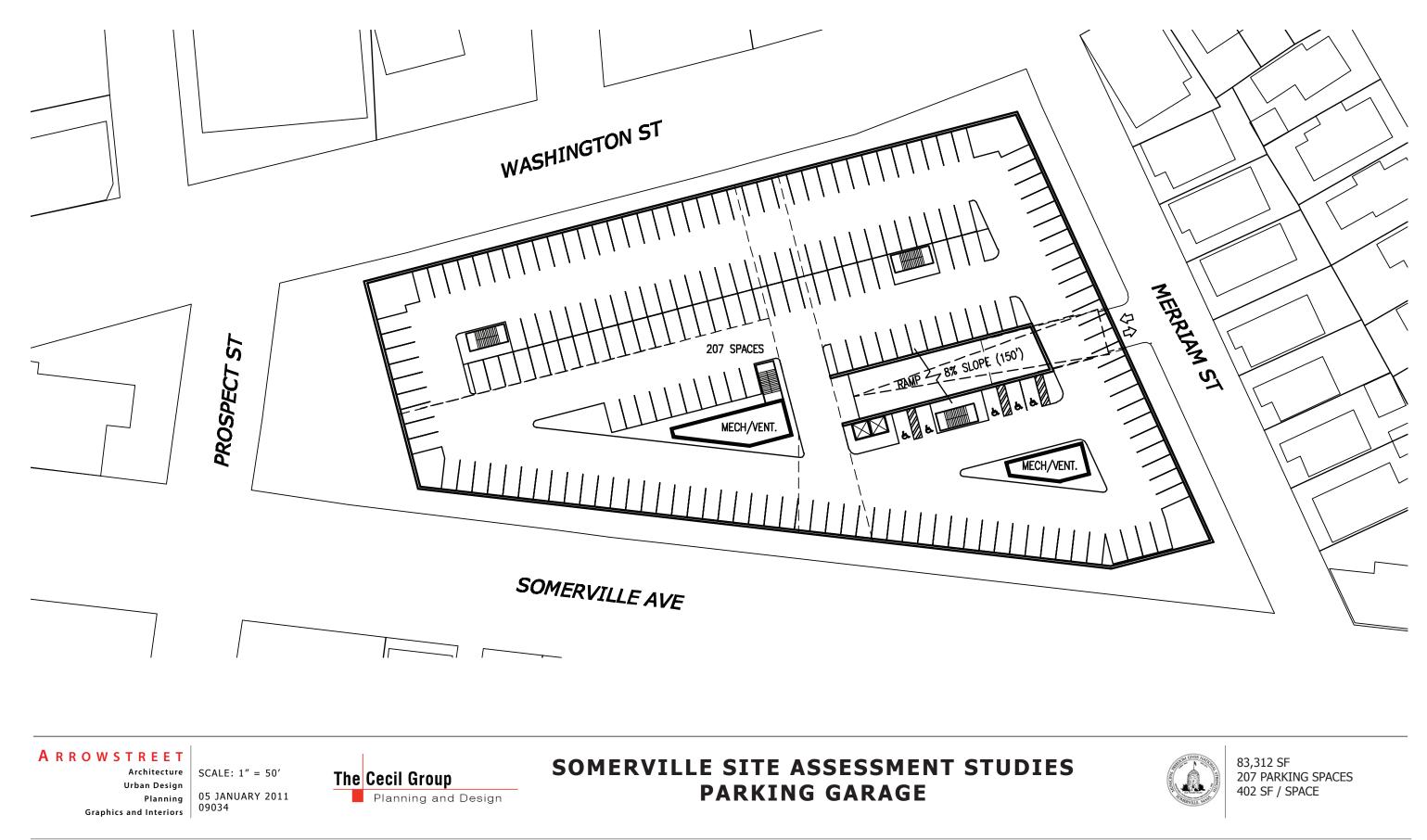
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City of Somerville, MA

FIGURE 24 | PHASING DIAGRAM







solidation should improve department operations and constituent services as well as create a significant economic and activity impact in Union Square. A new public safety building will likewise enable improved public safety operations for the City of Somerville. The relocation of the School Administration offices will enable the City to realize department efficiencies through centralized offices and create a campus for the City's educational resources.

Project Costs and Financing Strategies

The financial analysis conducted for the Recommended Scenario in Union Square found that the total building program associated with this scenario was 111,000 square feet of new construction which is expected to entail \$29,200,000 in new building construction costs. (The costs associated with the buildings vary. Calculations for general government offices is \$215 per square foot and \$285 per square foot for a library.)

This is a significant capital investment. There are several potential funding strategies that can be used to advance the program.

Property Disposition

Municipal properties that are no longer needed due to the consolidation of departments can be dedicated to other City needs or sold for private uses. Properties that could be made available for disposition include:

- The City Hall Annex, 50 Evergreen Street
- Recreation Building, 19 Walnut Street
- Kiley Barrel site, Somerville Ave and Prospect Street
- Traffic & Parking, 133 Holland Avenue

The assessed value of these properties presently is \$4,038,100 which could be used to off-set the capital construction costs of the new facilities and expand the City's tax base. In addition, a portion of the Public Safety Site and 10 Poplar Street could be sold. Others such as the Edgerly School and the Cummings School could also be sold if the School Committee determined they were no longer necessary. They are not necessary for municipal government operations.

Public Private Partnership

The Recommended Scenario allows options for combining with private development that could offset acquisition and construction costs as well as present opportunities for development agreements that could provide the City with funds for construction and facility maintenance costs while increasing the tax base for the City. Revenues are projected to come predominantly from additional commercial office space or other market-based uses. A process of developer selection culminating in a developer's agreement could define the basis for this public-private partnership project approach.

District Improvement Financing (DIF)

Using the powers provided through DIF, the construction of public infrastructure and public parking facilities could be funded with the anticipated increase in taxes provided by new development within a defined district. As a rule of thumb, each \$100,000 of new taxes generated by new development could fund about \$1,000,000 worth of public bonding.

Grant and Other Opportunities

Grant opportunities arise periodically that could leverage the City's own investment in the new facilities. For example, the Massachusetts Public Library Construction Program offers funding for land acquisition and construction of library facilities. It is believed that a new Central Library for Somerville could be very competitive in an application process. The phasing plan illustrated in Figure 24 takes into account that there grant funds may be the first funding component available to the City.

Green Building Benefits / Incentives

Design solutions could also consider the return on investment for a number of green building and infrastructure options. The ability to design a sustainable green building for the public facility would potentially save the City 25% to 35% on energy demand, thereby reducing long-term operational costs.

Proposed Phasing

Accomplishing the Recommended Scenario will require a carefully orchestrated program, or implementation plan, of relocations and construction. While some phases of the implementation strategy will be able to occur concurrently, the key steps in general chronological order are:

- Prepare a design and cost estimation for a new Central Library
- Secure grant and other funds for land acquisition and construction
- Bid and construct a new Central Library beside the existing Public Safety Building
- Prepare a solution for relocation of the Public Waste Facility
- Prepare a design and cost estimation for a Public Waste Facility
- Bid and construct a relocation of the Public Waste Facility
- Prepare a design and cost estimation for a new Public Safety Building at the former Waste Transfer Site
- Bid and construct a new Public Safety Building
- Prepare a design and cost estimation for a centralized City Hall office
- Construct a new City Hall office building in connection with the Central Library
- Relocate School Department facilities and offices to the former City Hall
- Make site selections and rededicate or sell vacated municipal properties
- Provide renovations and upgrades of existing municipal properties that continue as municipal facilities.

Note that City Hall construction could occur before the Public Safety Building was relocated so long as a parking solution that addressed all three facilities – City Hall, Library, Public Safety Building – and public parking was in place.

Conclusions

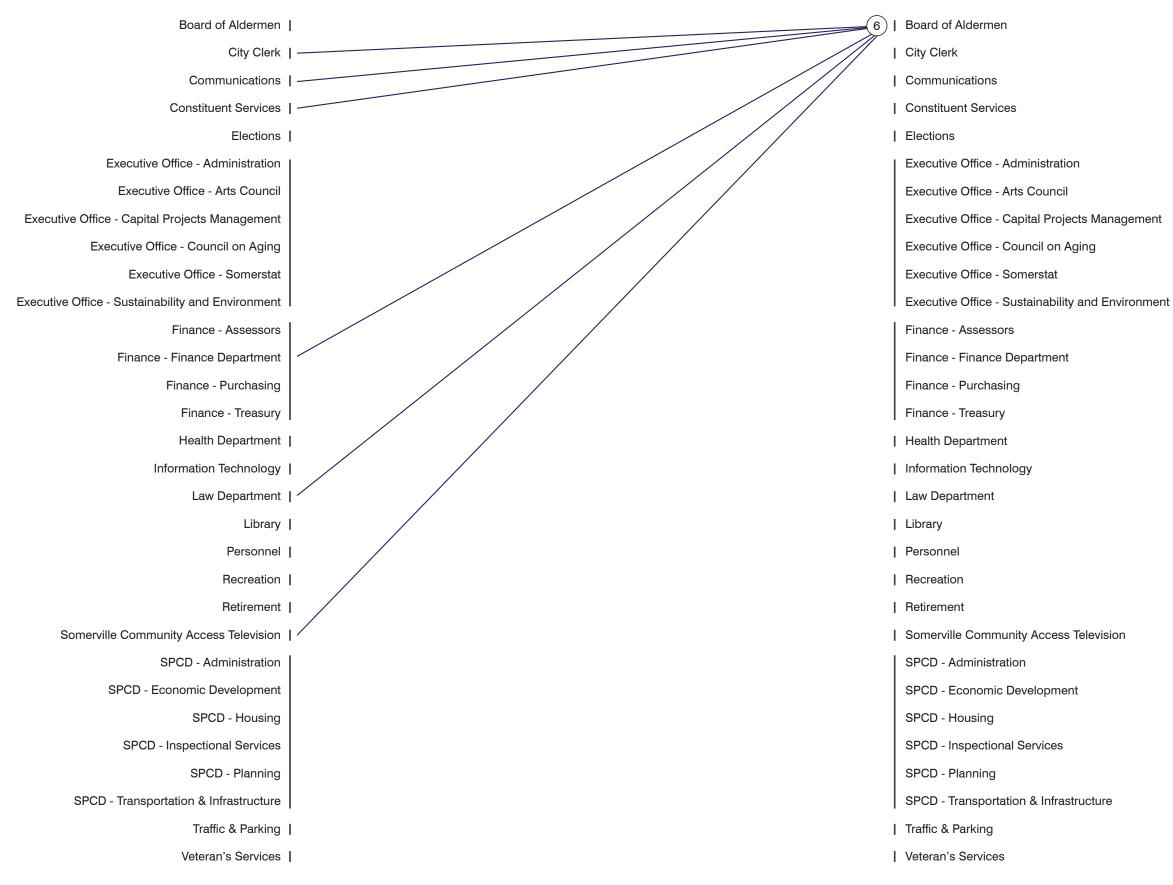
This Municipal Facilities Master Plan identifies the space needs of the City departments, divisions and programs, provides potential consolidation recommendations, evaluates a number of designated properties for potential municipal uses, and analyses the properties relative to municipal needs.

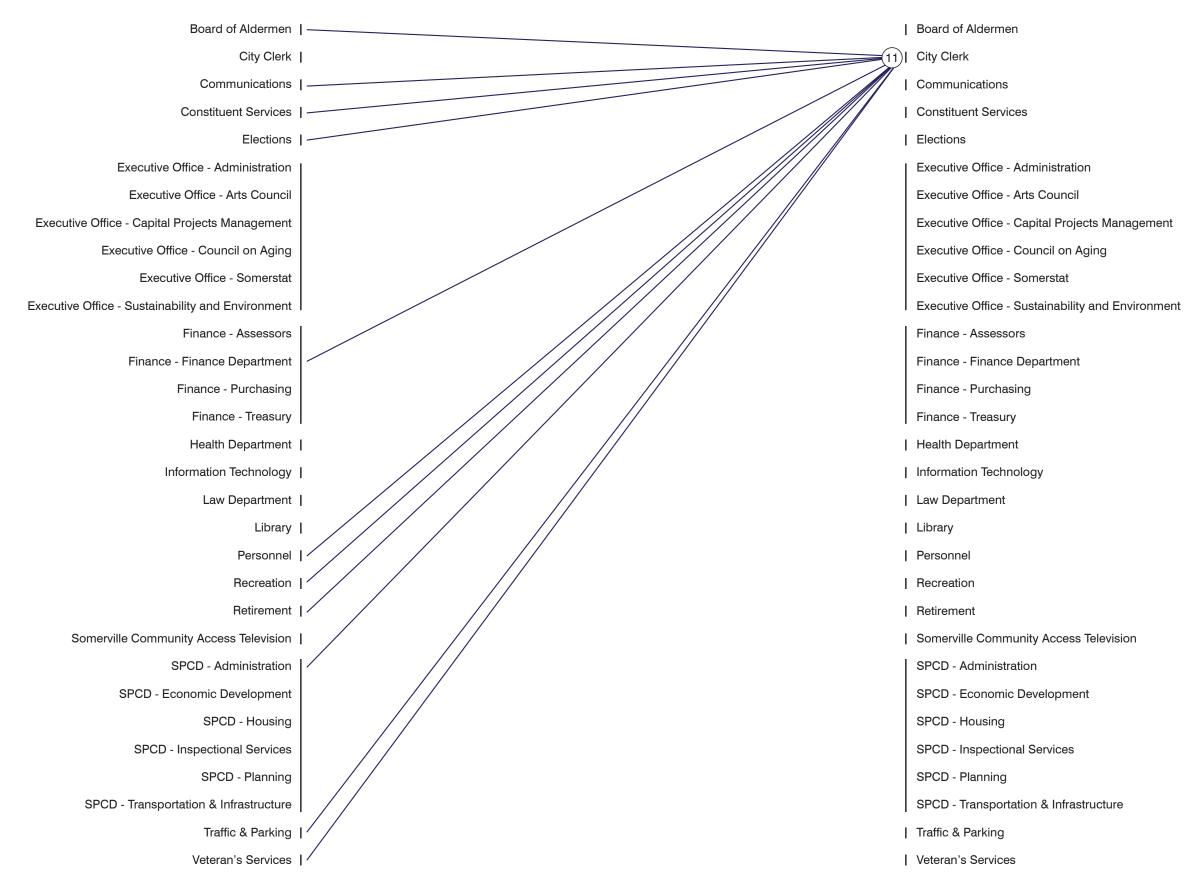
Based on these investigations, this study provides a Recommended Scenario, which could be supported through a combination of the financial and implementation strategies proposed. As documented within this report, the Recommended Scenario achieves the desired goals of municipal office consolidation for increased efficiency, sustainability and quality, while providing a positive economic impact on the surrounding area.

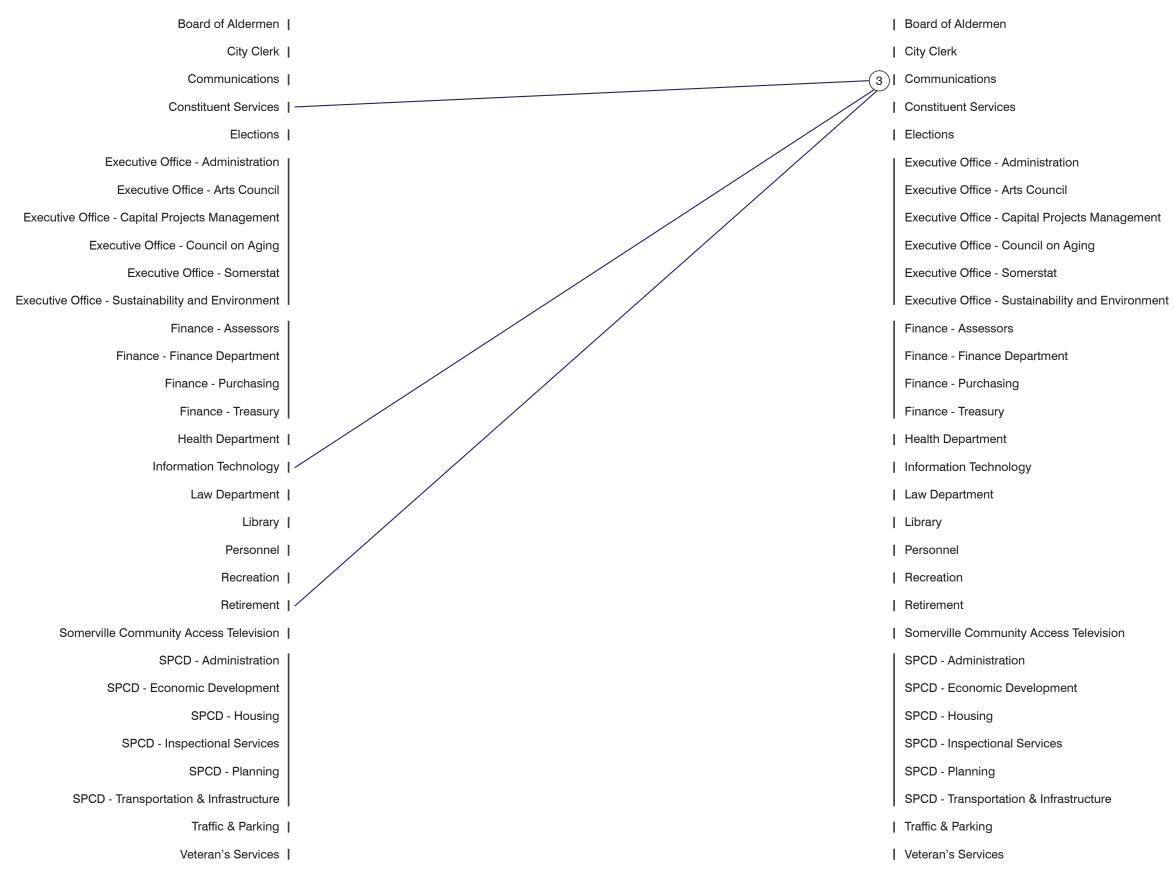
84 | RECOMMENDATIONS

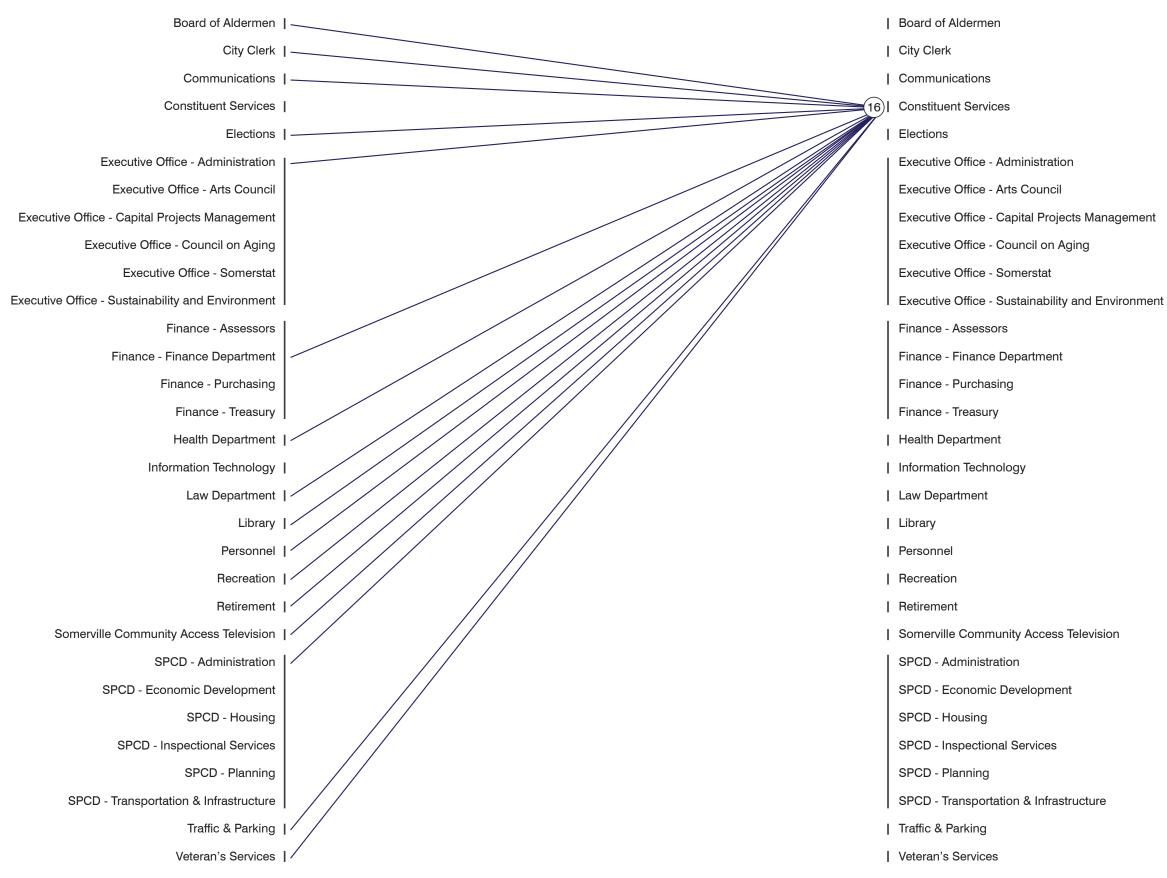
Appendix A: DEPARTMENT SPACE SURVEY DATABASE

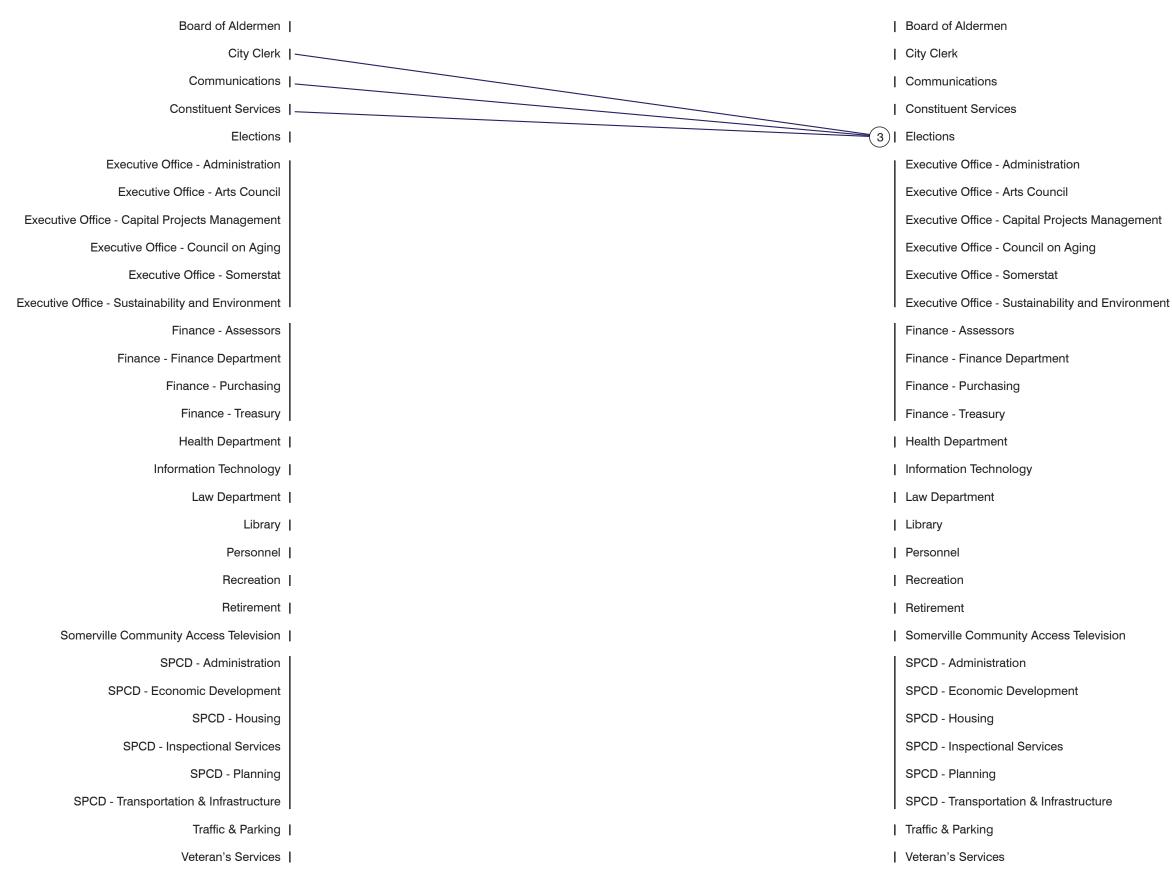
Appendix B: PRIMARY LINES OF COMMUNICATION

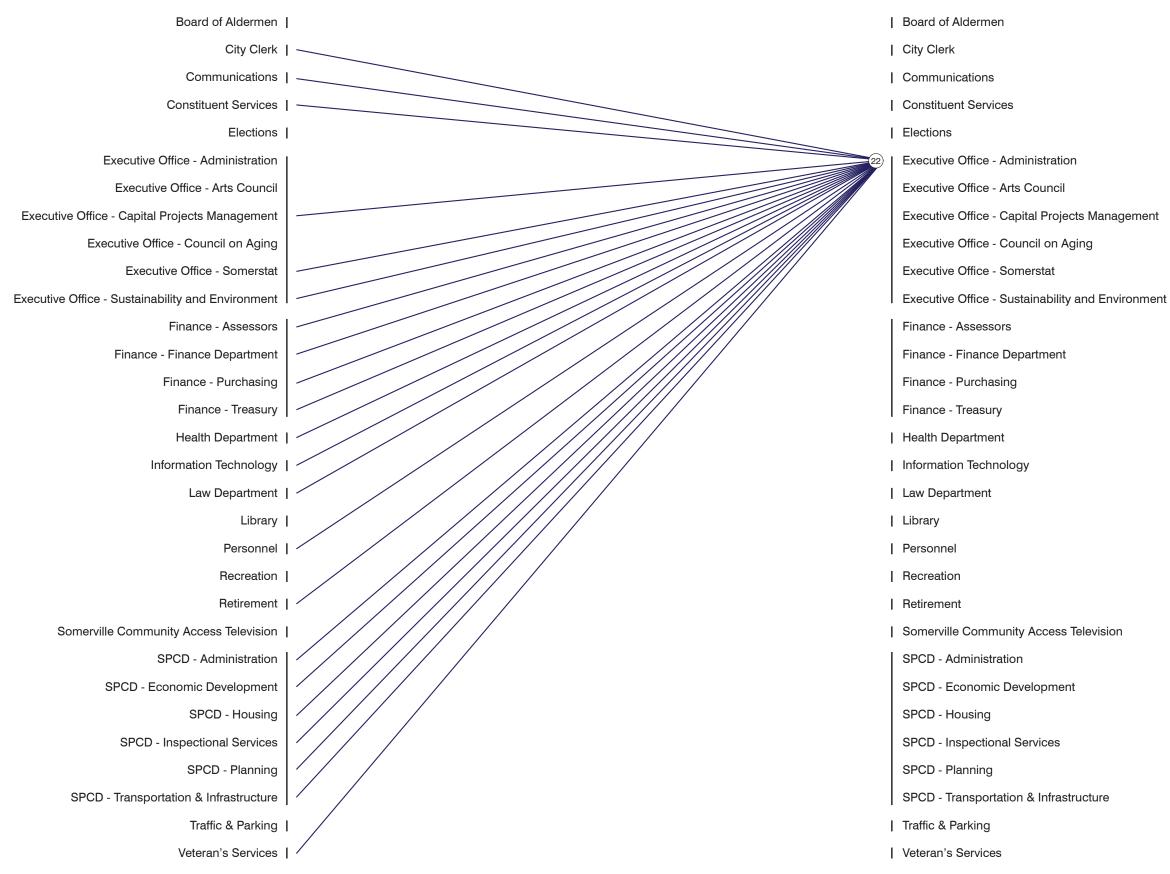


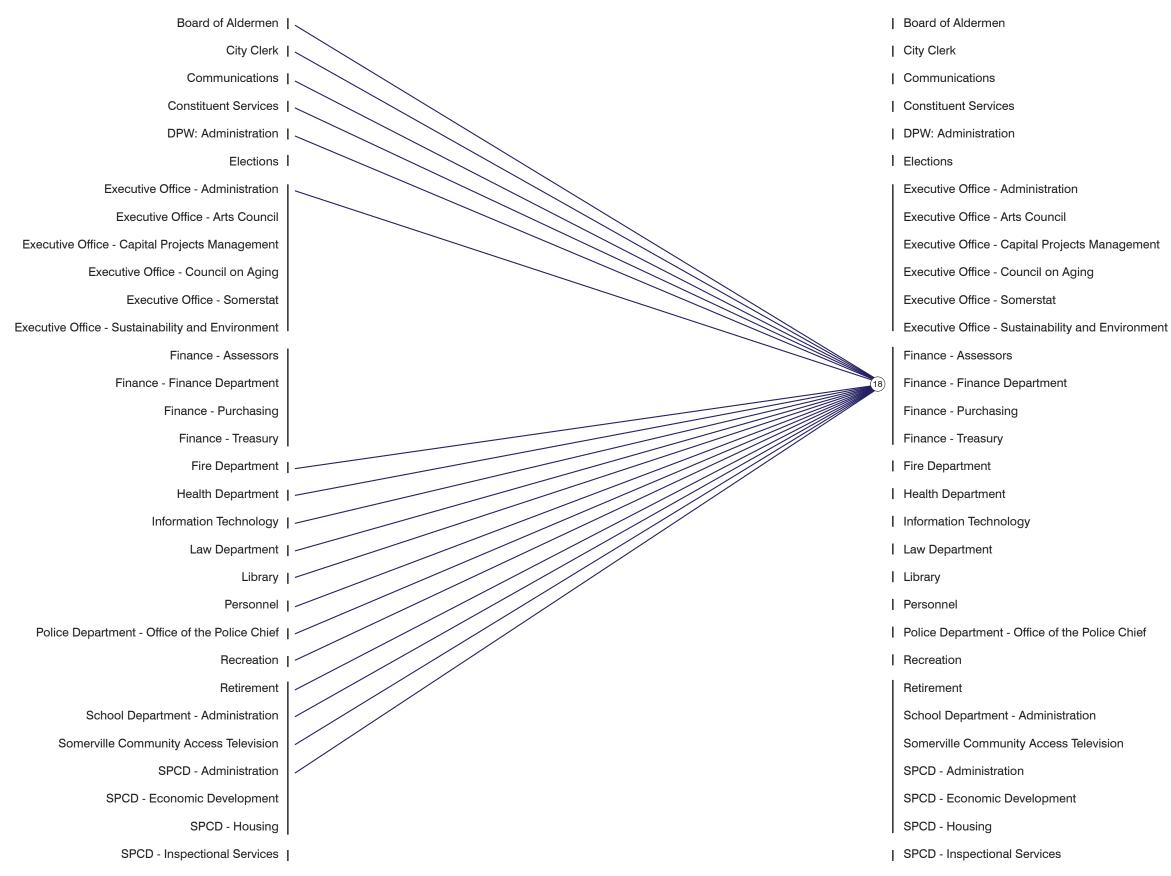


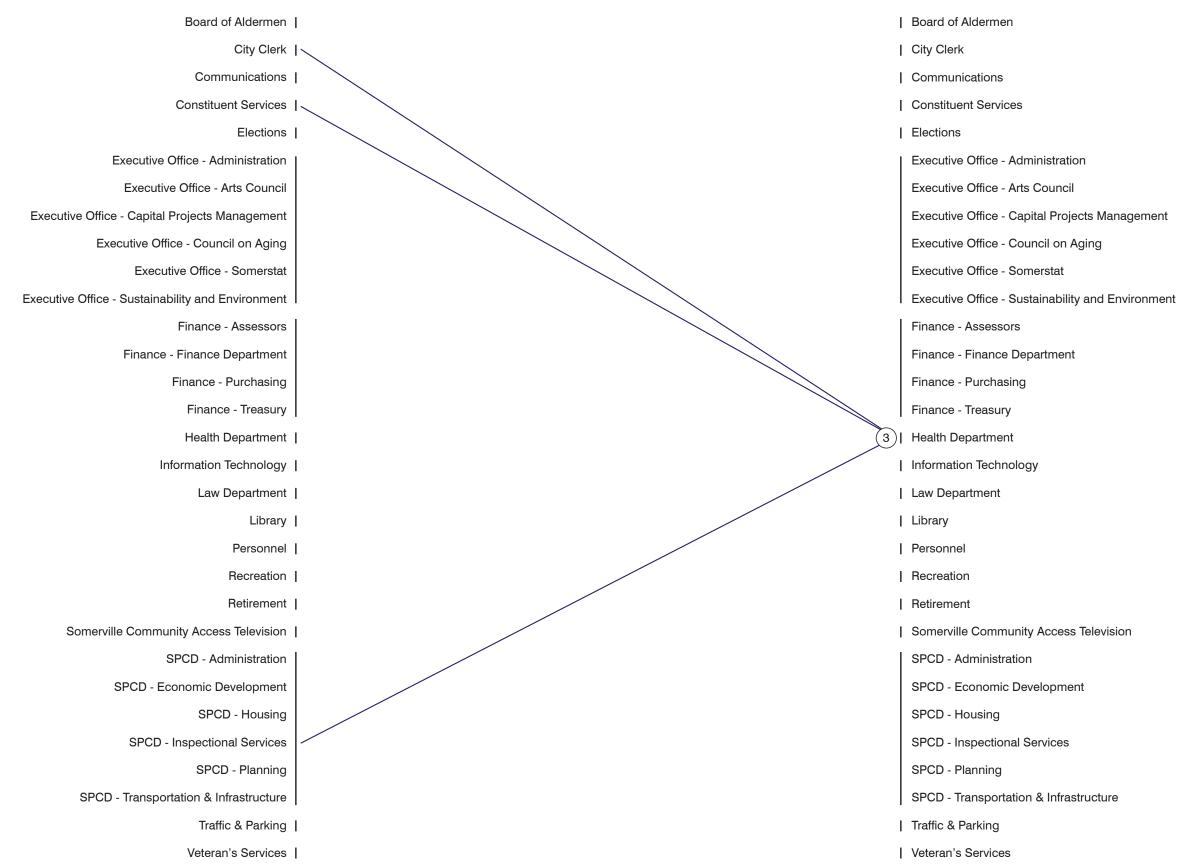


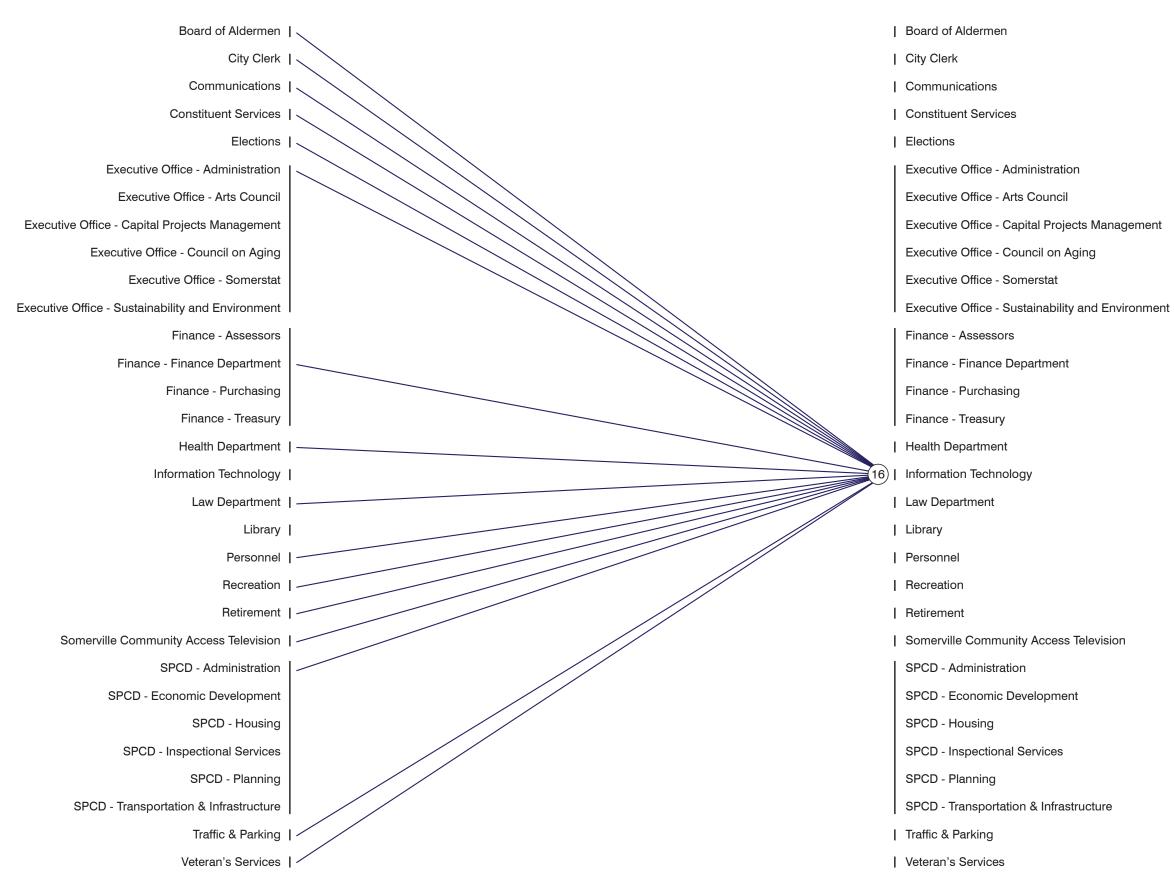


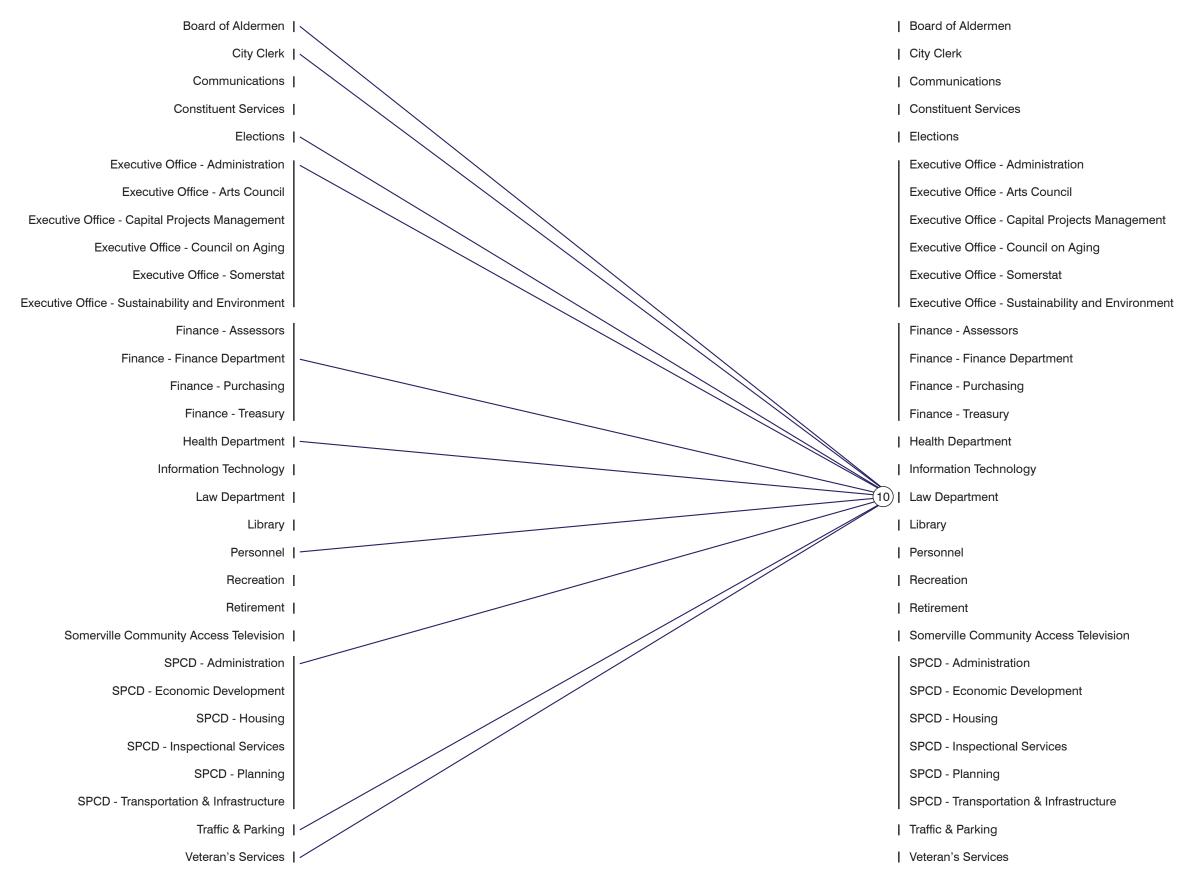


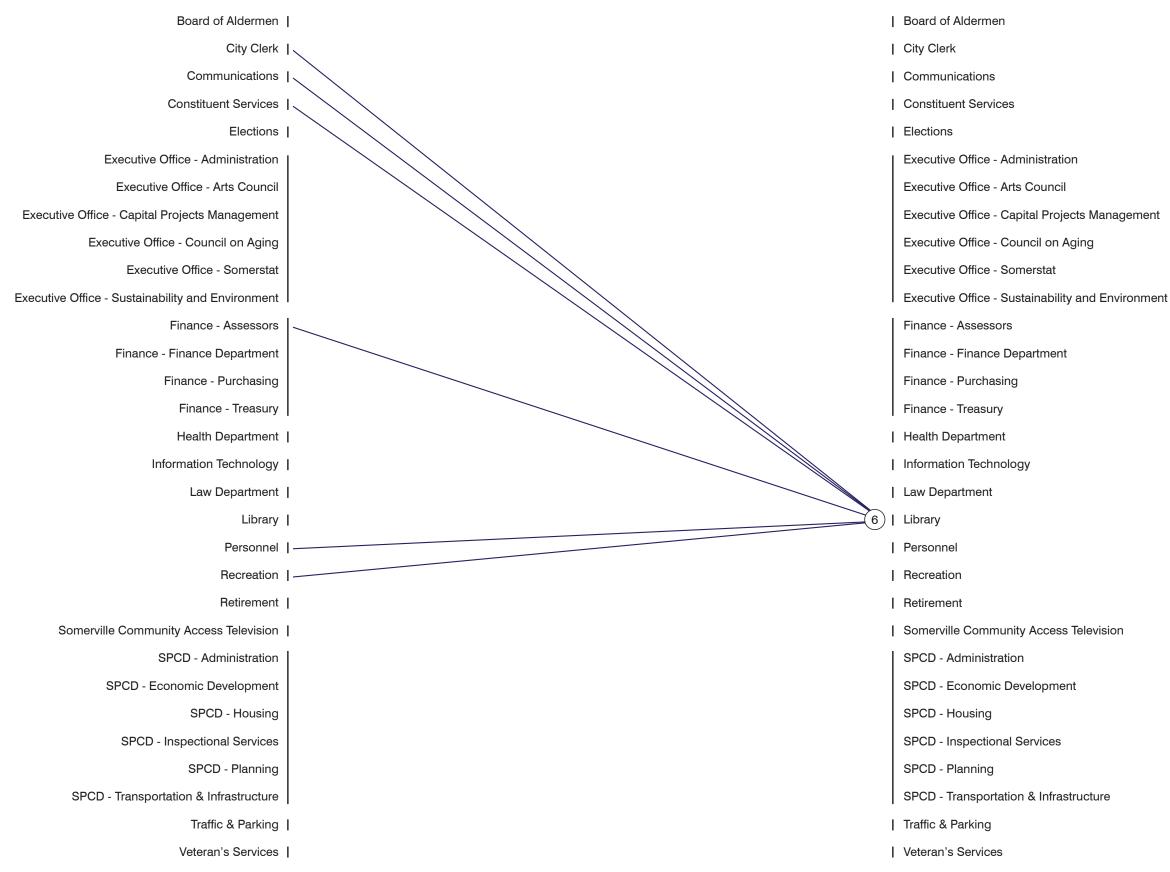


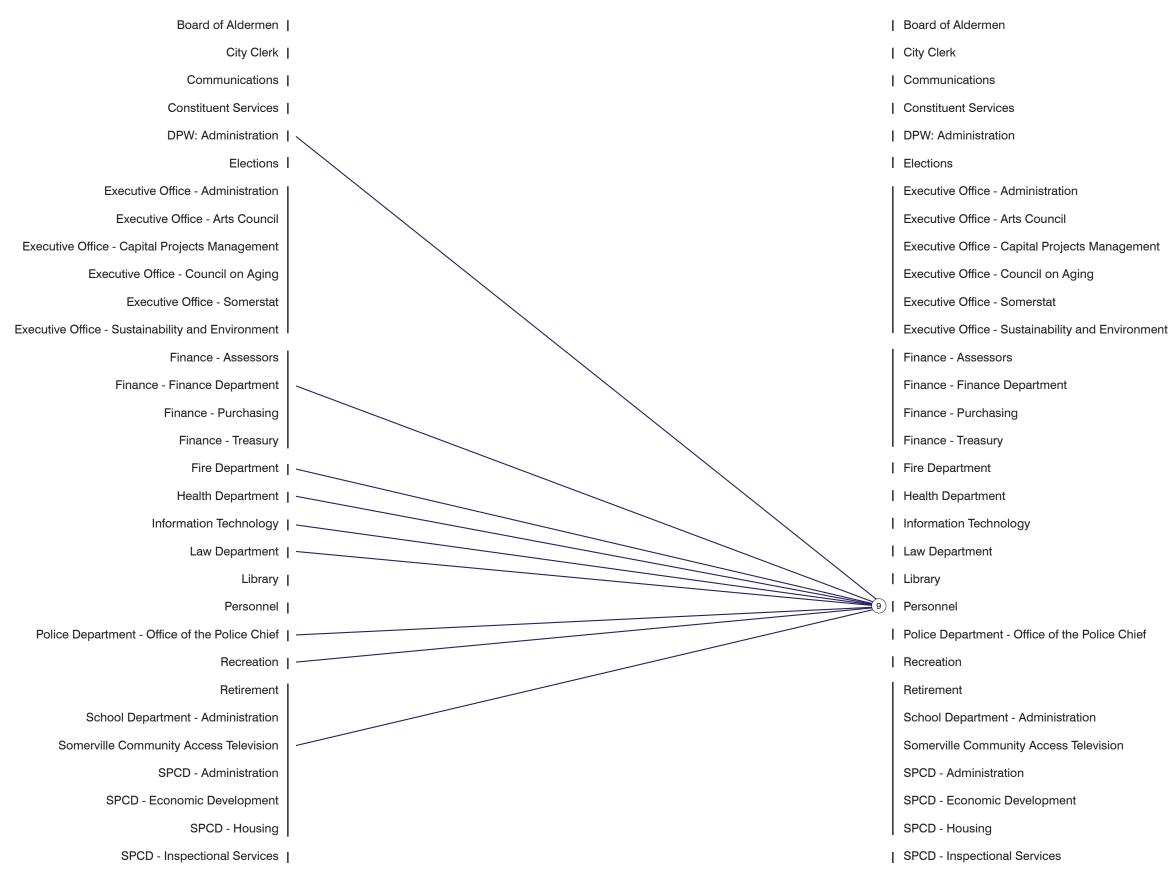


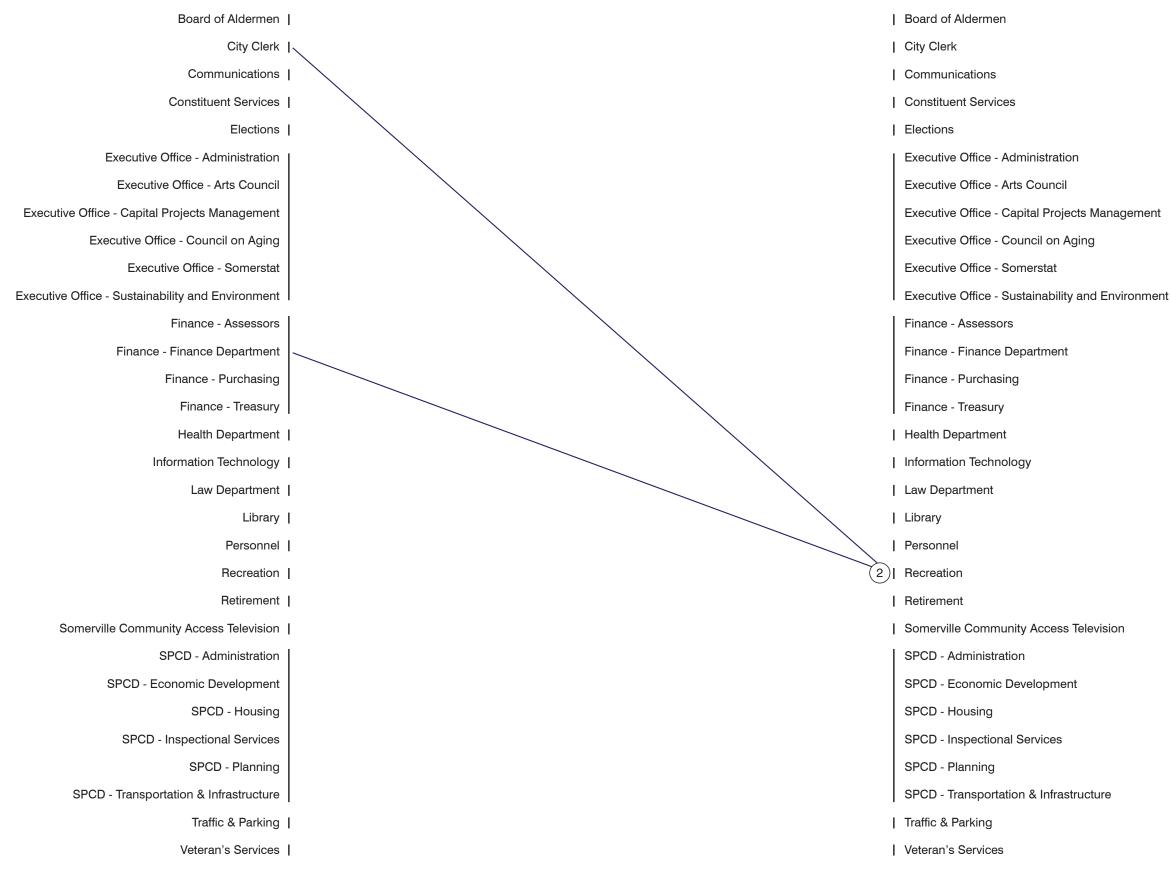


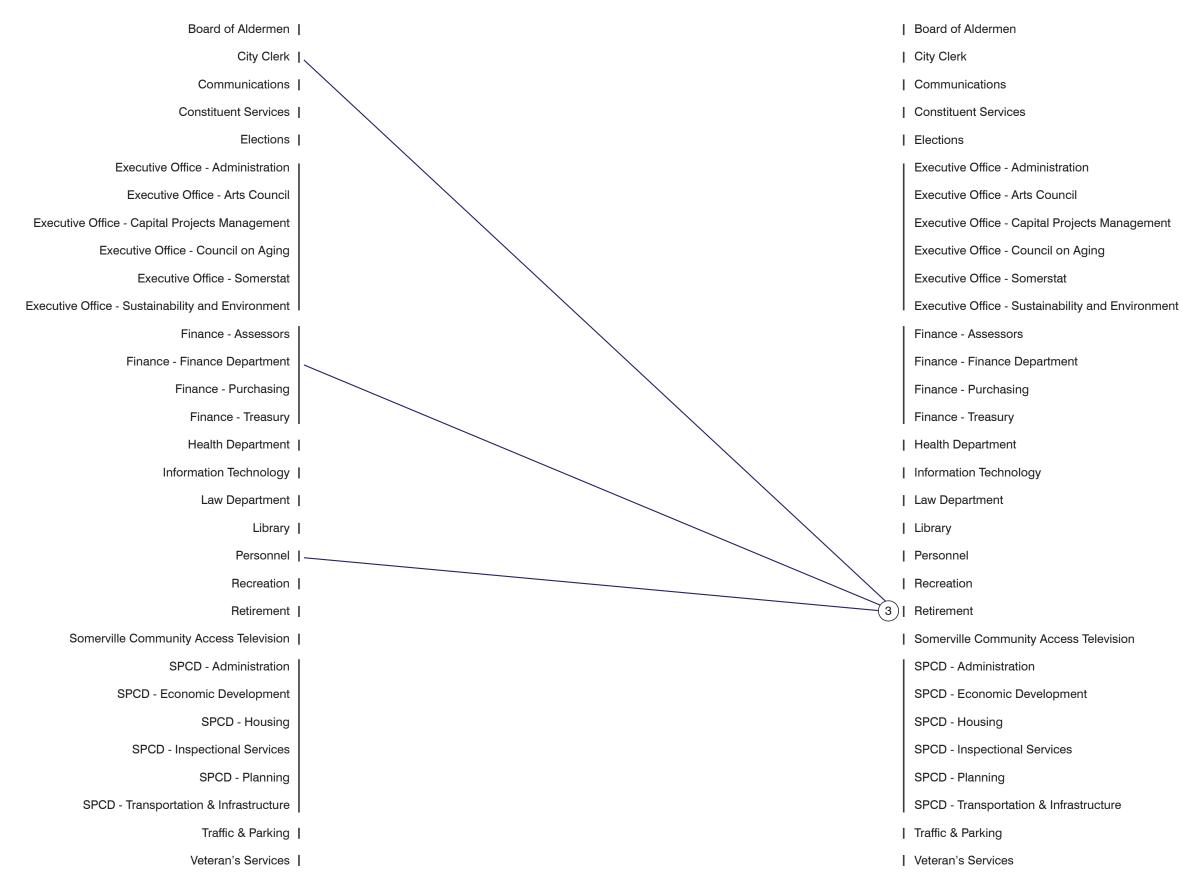


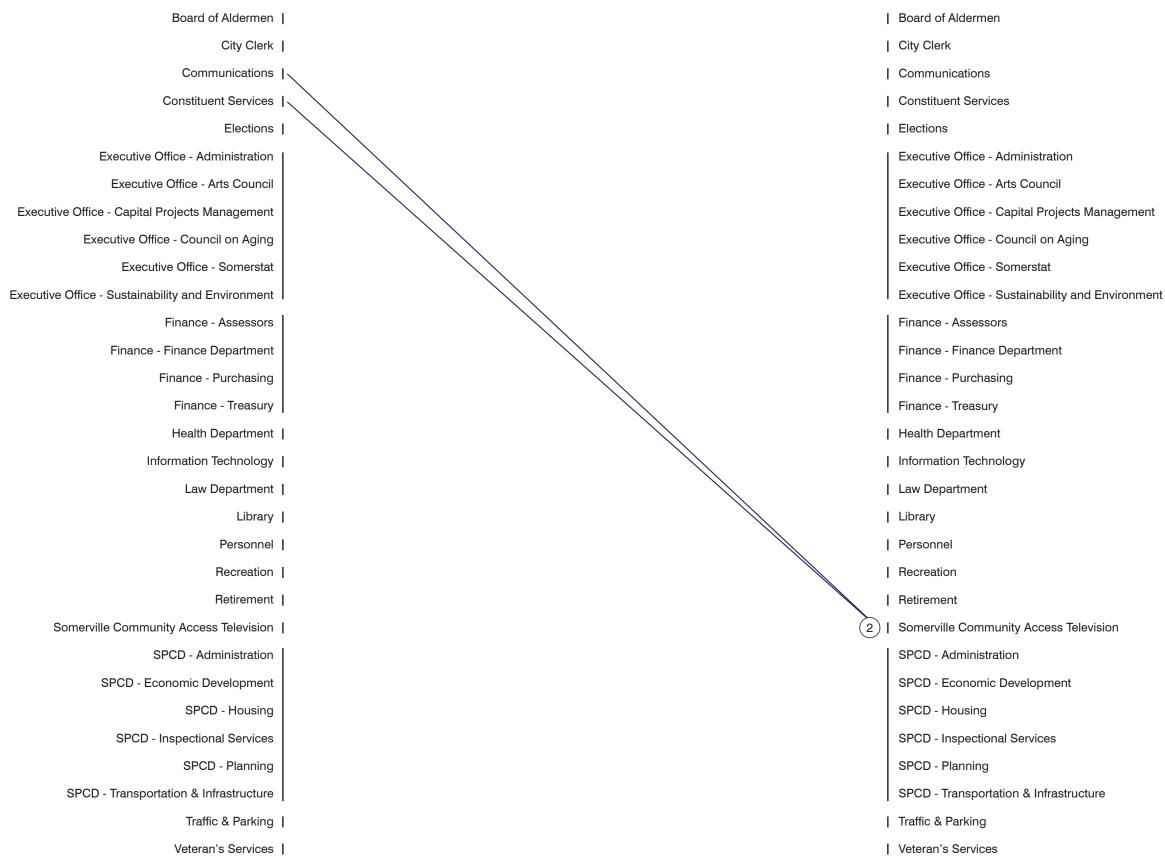


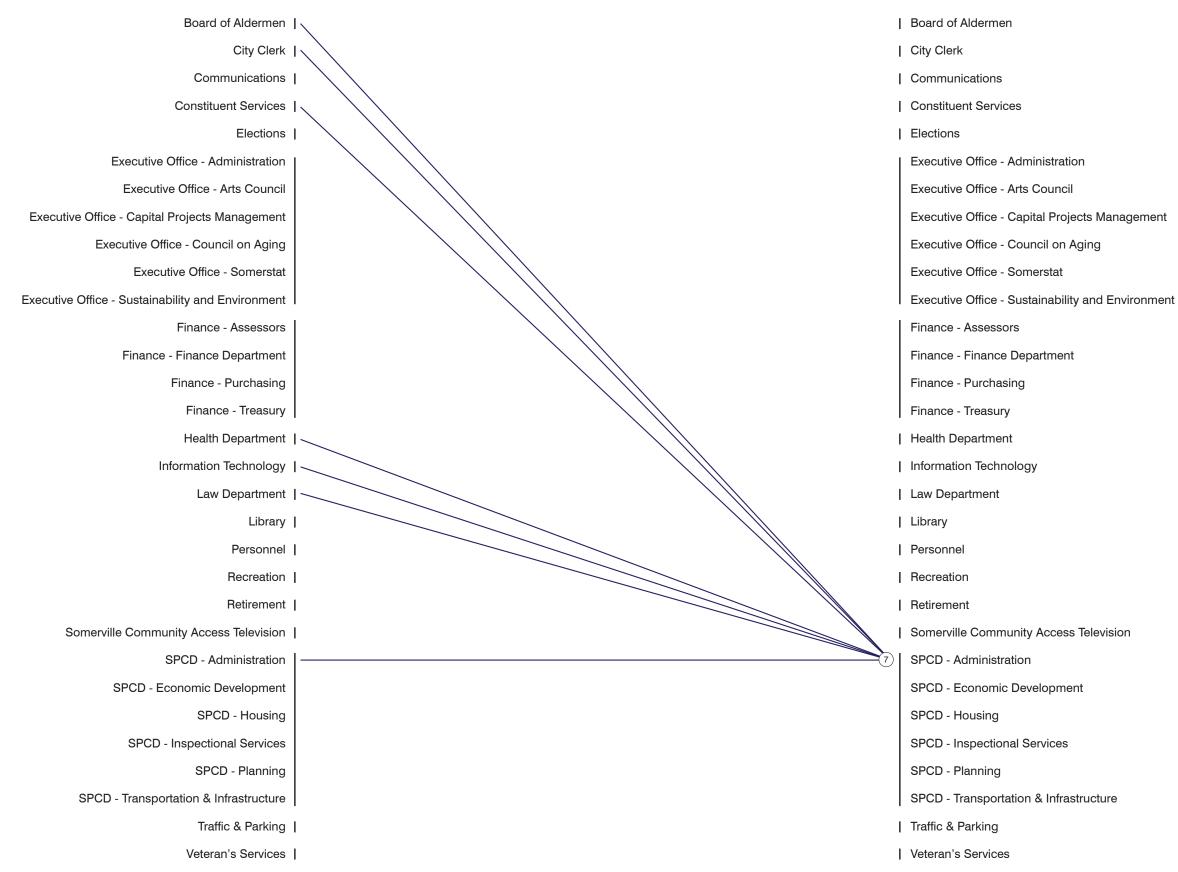


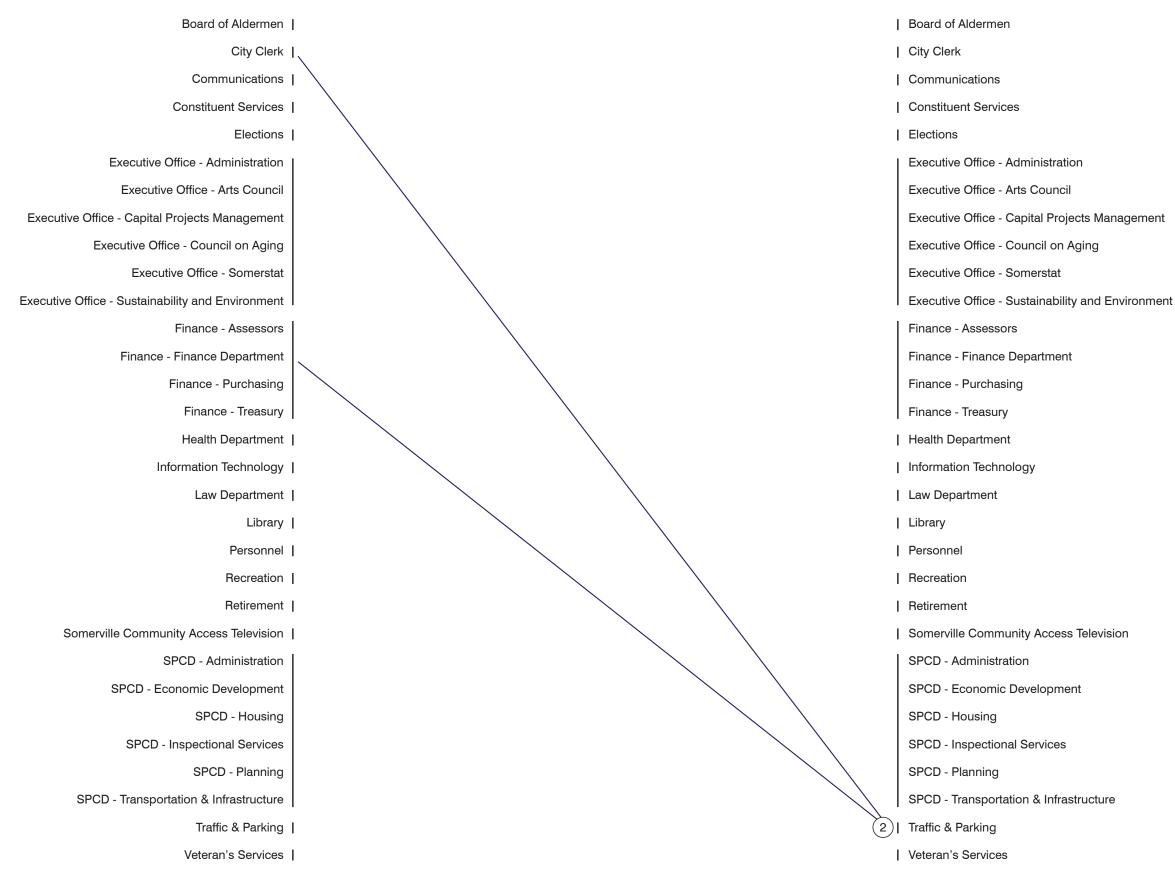


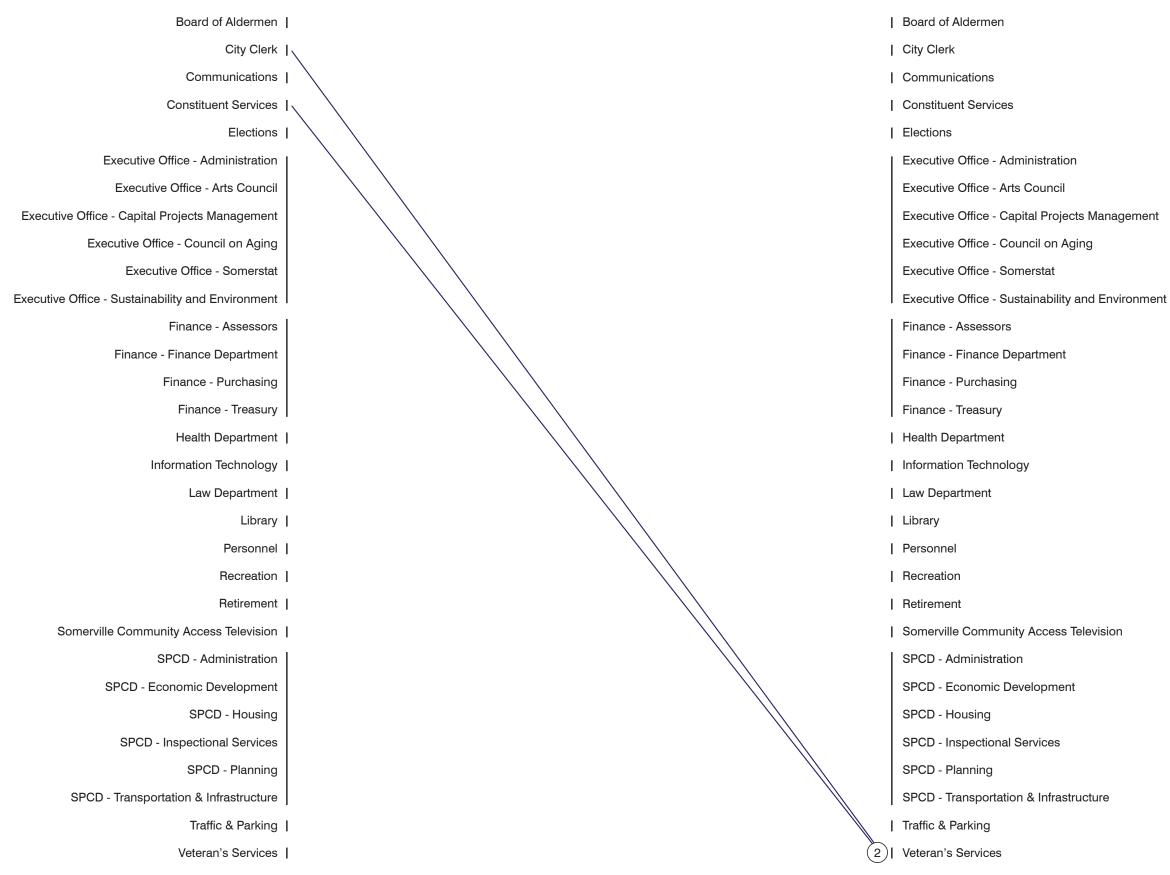












Appendix C: LIBRARY AREA AND PROGRAM REQUIREMENTS

LIBRARY BUILDING PROGRAM: AREA DESCRIPTIONS and GENERAL DESIGN REQUIREMENTS

Main Entrance and Lobby

The Main Entrance should be clearly visible from the street. The Lobby should be architecturally significant but not overpowering. It will be an inviting and visually interesting space where visitors can linger for a few moments and get oriented. It should be easy to find one's way to the other areas of the building from the Lobby, via traditional signage or other directional means. There should be a strategically-placed video screen with streaming video, announcing the day's programs and special events, etc. The only furniture in the Lobby should be benches and display cases. Patrons will not be encouraged to linger in this area—it is the gateway to the main service areas of the library. The Lobby should allow the entrance of ample sunlight during the day and be well lit at night.

Amenities for patron comfort should be directly contiguous to the Lobby. These will include public restrooms, a water fountain, lockers for storing personal possessions and outer garments, and public phone facilities—which should include a pay phone and also an area for the private use of cell phones.

Circulation

The Circulation Desk will be the closest service department to the Lobby and clearly visible from that area. It will look very different from the current circulation desk. There will be several self-check stations, where patrons will check out their own materials. There will also be a segment of the Circulation Desk where traditional circulation service performed by staff will take place. This station will also register patrons, make library cards, and handle questions and problems pertaining to circulation records and transactions. A third are of the Circulation Desk will handle returns of materials. There should be ample space behind the desk for the movement of staff, as well as the placement and easy movement of multiple book trucks.

Somewhere near the Circulation Desk there will be one of the library's photocopy/fax/ scanning stations, for the convenience of patrons who come in just for this service and do not need access to collection service areas of the building. It is placed here rather than in the Lobby, so that Circulation staff may help patrons with the equipment when necessary. This service could be shared with the main lobby of the City Hall.

Opening immediately off of the public Circulation Desk area will be a large workroom. The workroom will also be directly accessible from the outside (or a corridor leading therefrom), so that the network delivery may be dropped off and taken away without being taken through public space. The workroom will be used for processing the delivery, storing reserves, processing the consignments of new books from Cataloging, and other duties pertaining to circulation functions. There should be a separate area dedicated to storing and sorting the incoming materials and preparing book trucks for shelving. Staff desks will be in the workroom, or contiguous to it, and the private office for the department head will open off the workroom. Ideally the outside, after-hours book drop should be placed to deliver materials directly into the Circulation workroom through a chute from the outside of the building.

Technical Services (Acquisitions and Cataloging)

Technical Services carries out the function of receiving and processing new materials shipped from vendors, cataloging the materials and delivering them to Circulation for shelving. This department should be placed directly next to the Circulation department, so that movement of new books, books that need to be repaired or withdrawn from the catalog, etc. can be easily and effortlessly moved between the two departments. Doorways between the departments should be wide to accommodate book trucks passing each other as materials are transferred from one department to another. The Technical Services work area will have a large open central space to accommodate large tables for sorting and processing of materials, with room for book trucks to be pulled up beside them for the off-loading of books coming in from the shipping room and on-loading of books bound for Circulation. There will be staff cubicles and desks around the perimeter of the work area, and a private office for the department head will open off the work area.

There will be a room close to and easily accessible from the outside to take delivery of boxes of new materials and store them until they can be taken into the Technical Services work area for processing. The door to this shipping room should open off of a loading dock, where delivery trucks will pull up and park to drop off boxes. There should be counters on which the boxes can be piled and opened and plenty of space to pull book trucks up to the counter for on-loading of newly-delivered materials.

Opening off of Technical Services, and preferably also with a door from the Circulation workroom will be a Friends Donation Room. Donated books that are dropped off at the Circulation desk will be deposited in this room for the Friends book sales. Sorting of the books by the Friends will take place in this room.

Children's Services

The other public service department occupying the entry level of the library will be Children's Services. The departmental space will be comprised of several differentiated areas. The largest part of the space will be devoted to the children's service desk(s) and the children's collection. There may be one or more service points, or the librarian providing service may rove, depending on the service philosophy and protocols current at the time of opening. The collections will be stored on shelving of a height reachable by children of various ages, with none of the shelving being more than 60" high. The main space of the department will also contain public access computers and media listening/viewing stations.

Furnishings in the department will include a mixture of tables and chairs of various sizes to accommodate a range of children of different ages, as well as tables and chairs comfortable to the parents who accompany them to the area. There will also be comfortable seating areas with upholstered chairs suitable for adults to use while waiting for children attending programs. There should also be some novelty furniture for children. There will be a coat rack, umbrella rack and a place to leave boots. Separate from the main service area and collections will be a Story Hour Room, where the children's librarians will present story hours and other programs for small gatherings of children. The space should accommodate 50 children and will have an open performance space and built-in seating. This room should be well insulated for sound, so that programs can be conducted without sound intrusion into the main space of the department.

Another separate area will be a Crafts Room. Craft programs and other hands-on activities will be carried out in this room. It will have washable floors and work surfaces and water available in the area. The concept for this space is one in which children can be messy and the aftermath can be easily cleaned up. This room should also be well insulated against sound intrusion into the main space of the department and have lots of storage cabinets for art and craft supplies.

The Children's Services department should also have two or three quiet study rooms, where up to four children can work on school projects together. The area will also contain public restrooms sized for children's comfort and a Copy Center, with photocopier and scanner.

Contiguous to the public spaces will be a workroom and office area for the children's services staff and a private office for the department head.

Adult Services

Adult Services will be the largest public service area on the second floor/upper level of the library. The area will contain all the adult and young adult collections, including audio-visual collections, the reference service area, and seating areas and study rooms for adults and young adults.

The Reference Service Desk(s) will preferably be located on the same floor as the Adult Services, but there will not be the traditional high, formidable, barrier-type reference desk. The current model of innovative reference service involves small desks located close to where patrons sit and gather, as well as roving reference librarians, who walk the floor and offer service to individual patrons. When the new Central Library opens a few years hence, reference service may include one or both of these models—or something entirely new that will come along between now and then. The leitmotif is that reference librarians should appear approachable and should be proactive in offering service, and that furniture should not stand in the way of patron/librarian interaction.

The Adult Services floor will have various seating configurations from traditional carrels and tables of various sizes with chairs, where people can spread out materials and use their laptops for quiet study, to areas with comfortable upholstered chairs and accent tables where people can gather for conversation and impromptu informal meetings. There will also be comfortable individual seating in quiet areas of the floor to accommodate patrons who want to sit and read quietly or listen to personal audio devices. There will also be a periodical reading alcove. This area should also contain several group study rooms of various sizes to accommodate group study.

There will be a separate Young Adult Room, where teens can gather for conversation and study in a space that they can consider theirs. The area should be well distant from the quiet study area for adults but not secluded. Teens will receive reference service from the same staff that provides adult reference service, so if there are multiple reference service points, one should be near the Teen Room. The Young Adult collection will be located in this area. Furnishings and décor should be teen-friendly. There will be some type of multi-media feature area in the Teen Room, perhaps focused on gaming.

There will be fixed stack shelving in all areas of the Adult Services department to accommodate the bulk of the print collections, but there should also be modular easily movable shelving units for displaying new books, mounting mini-exhibits and housing audio-visual collections. There will also be an Audiovisual Viewing and Listening area, which will contain individual booths for private viewing and listening and a room for group viewing and listening.

The area will also be home to the Local History Room. The Local History Room will house the local history collection and will have environmental controls that will enable this collection to be kept at optimal temperature and humidity levels. It will have the sophisticated storage configurations required to properly house fragile and odd-sized materials such as maps, which require large flat cases for storage. There will be shelving for 3500 books, a desk with four chairs for researchers to work at, and space for a microfilm reader, scanning equipment and a computer for delivery of scans to various storage media. There should be no windows in the Local History Room, as the collection needs to be protected from the UV radiation in sunlight. Artificial lighting in the room must not produce UV radiation.

The Adult Services area will contain a cell phone booth of some configuration, where cell phones may be used without disturbing those who are studying and reading. The area will also contain a Copy Center, with photocopier, fax and scanner.

Contiguous to the public areas will be a workroom, including a conservation lab, and staff office area (cubicles), as well as a private office for the department head.

Computer Lab

Located in close proximity to Adult Services on the second level of the library will be the Computer Lab. This will be the location of the public access computers for adults (40), as well as a computer classroom, in which will be held computer literacy classes and tutoring in a variety of configurations, such as open lab sessions.

The public access computer area will have desktop computers and/or laptops, as well as tables to hold the computer stations and chairs. It will be equipped with a station for a technician who will oversee the lab and with printing equipment. The classroom will most likely be equipped with laptops (12-15), a projection screen and a teacher desk. How the space will be divided between these two functions will be decided based upon what type of equipment will be used in each area. A closet to hold computers when not in use and supplies will be accessible from both areas of the Lab.

Administrative Offices

The Administrative Offices will be located on the upper level of the library. Entrance to this office complex should be near the elevator and/or main staircase from the lower level, for easy access by the public. The administrative work spaces will provide office space for the Director, the Assistant Director, and one clerical staff member (receptionist/payroll clerk).

Board Room

A meeting room with support space for functions with a capacity of about 40-50 people is needed for meetings of the Board of Trustees. This meeting room will be accommodated in the joint meeting spaces of a combined facility.

Staff Lounge and Dining Room

The staff lounge and dining room will be comprised of two distinct spaces. The lounge will be a space for staff to relax, read, etc, during breaks separate from the area where food preparation and dining take place. The furnishings in this area will be mostly comfortable upholstered furniture, though there may also be a table and chairs for game and card playing. The Dining Room will be equipped with a sink, stove, refrigerator and microwave and will be the area where staff prepare food and eat their meals. There should be counter space for small appliances such as a coffee maker.

Staff Lockers

Adjacent to the Staff Lounge and Dining Room, and opening off this area will be a room with staff lockers. Shower facilities for staff might also be located in this area (for those who want to exercise during lunch hour).

Mechanical Rooms and Wiring Closets

Mechanical rooms and wiring closets will occupy space on one or both levels of the building. There should be work space and storage for supplies for the custodial staff contiguous to one of the mechanical rooms.

Elevators and Stairwells

The elevators and stairwells will be factored into the final square footage of the combined building to provide circulation and support to each of the functional areas.

GENERAL DESIGN REQUIREMENTS

Type of Building: A "box" is the best style of building for a library, in order to achieve maximum functionality and usability of space. It is very difficult to fit book stacks efficiently into a round, octagonal or other unusually-shaped building. The building should be designed for maximum flexibility. Thus there should be no load-bearing walls within the building spaces. The support should all be in the perimeter walls and columns. A building of two levels is postulated in this document, though the

space could be spread out over more levels if, for instance, the Library were to be included in a multi-purpose high rise building in Union Square.

Lighting: Lighting in a library should enable patrons to find materials easily, facilitate reading without eye fatigue in long-term use, and provide a comfortable and appealing environment without glare or wide variations in lighting levels. Task lighting can be useful but should be affixed to furnishings and easily controlled by staff and/or patrons. Lighting should be designed with energy efficiency in mind, and follow standards for library design. Stack lighting must be designed and installed so that lower shelving levels are adequately lit and glare-free.

Americans with Disabilities Act: Federal and state access guidelines must be followed.

Acoustics: In addition to a design which implements the guidelines of proximity and distance outlined in the building program, every effort should be made to sound proof such areas as Reference, quiet study rooms, meeting rooms, and staff work areas. Sound absorbent materials should be used wherever possible, and sound systems should be effective at any attendance level in the room. Except for entry areas (lobbies, receiving room, etc.) and areas that are likely to get wet (children's Craft Room), floors should be carpeted with the highest quality institutional carpet the budget will allow.

Windows: Staff but not patrons should be able to easily open and close windows. Window treatments should control strong sunlight without the use of blinds or shades.

Signage: Signage must meet the Americans with Disabilities Act requirements. It should be clear, attractive, and communicate the layout of the building well to library patrons. Too much signage can be confusing and ignored. Staff should be able to change signage easily as needed.

Security: The building security system must be adequate to control emergency exits while the Library is open and protect the building when closed. It must be easy to operate by staff and not accessible to patrons. Repairs or maintenance to the building should not disable the system. The building should be equipped with a dry (gas) sprinkler system as well as a fire alarm system.

Staff Supervision of Building: The building should be designed so that a minimum of staff can supervise public service areas, including rest room and meeting room entrances, lobby or corridor areas, and seating/shelving spaces. Lines of sight must be determined for every space. The security of staff and patrons is critical.

Ergonomics: Spaces and furniture should take ergonomics principles into consideration. Staff and patrons must be comfortable for appropriate lengths of time while providing service or using the Library.

Energy Efficiency: All systems should be designed for maximum energy efficiency. The building should be as green as possible in all ways.

HVAC System: The HVAC system must be designed so that the staff and the Department of Public Works personnel but not the patrons can easily control the operation of the system. Zones must be carefully planned so as not to create hot and cold spots.

Maintenance: Although an increase in square footage should result in increased custodial care of the Library, allocation of resources for its care and maintenance is likely to remain minimal. Therefore all choices of materials and design elements must result in ease of maintenance. Durability, ease of cleaning, resistance to graffiti and resistance to signs of wear are essential.

Theft Detection: The Library's theft detection system must operate effectively. A system should be installed that is easily operated by staff and takes advantage of the most efficient patron traffic pattern at a minimal number of exits. Library staff will compare benefits and disadvantages of different theft detection systems before purchase of new equipment.

Technology: The area descriptions specify public access computer workstations in, as well as staff workstations at public service desks and in offices, as well as a computer lab for 40 patrons and a computer classroom. Our current expectation of access to our network by these computers is that there will be a combination of hard-wired and wireless connections. Therefore it is important that an adequate number of electrical outlets are available and in the appropriate locations for the computers, and that a wireless system would make wireless access available in all library locations.

Flexibility: Spaces should be designed for maximum flexibility and openness, with fixtures adjustable and movable. For example, growth of new formats should allow changes in spaces in the Audio-Visual collection storage as well as other areas.

Interior Design: Interior design elements should be carefully chosen to avoid trendiness or fads. The design should convey warmth, light, and color. The Library's role as a community center, with a wide variety of services and materials to offer, should be obvious. Architectural details should lend a sense of beauty to the interior and underscore the importance of this public building.

Floor Plan: The layout of the Library should be easy for patrons to discern—both signage and traffic patterns should facilitate ease of movement through the Library.

Appendix D: POTENTIAL SITE PHOTO INVENTORY



515 Somerville Ave.







- FOR SALE

617-826-3490C

JNITS

MAZZEC

515 Somerville Ave.





Burger King from Mansfield St.



Burger King/John's Auto Sales from Somerville Ave.



Homans Building



Burger King from Medford St.



Burger King/John's Auto Sales from Somerville Ave.



Kiley Barrel site from Milk Place



515 Somerville Ave.



Burger King from Mansfield St.



Burger King from Somerville Ave.



Homans Building



Kiley Barrel site from Milk Place



Kiley Barrel from Prospect Street



Kiley Barrel from Prospect Street



Kiley Barrel from Prospect Street



Kiley Barrel from Somerville Ave.



Public safety block - Ricky's Flower Market















Kiley Barrel from Prospect Street



Kiley Barrel from Somerville Ave.



Public safety block - Ricky's Flower Market



Kiley Barrel from Milk Place



Kiley Barrel from Prospect Street



Kiley Barrel from Prospect Street



Kiley Barrel from Somerville Ave.



Public safety block - Ricky's Flower Market

SOMERVILLE MUNICIPAL FACILITIES MASTER PLAN City of Somerville, MA



Public Safety block from Somerville Ave.



Public Safety block from Somerville Ave.



Public Safety block from Somerville Ave.



Public Safety block from Washington St.



Waste Transfer facility - Linwood St.



Public Safety block from Somerville Ave.



Public Safety block from Somerville Ave.



Public Safety block from Washington St.



Waste Transfer facility



Waste Transfer facility - north property



Public Safety block from Somerville Ave.



Public Safety block from Somerville Ave.



Public Safety block from Washington St.



Waste Transfer facility - east property



Waste Transfer facility - south property



Appendix E: SITE ASSESSMENT MATRIX

APPENDIX E: SITE ASSESSMENT MATRIX

Site Name	ASTER PLAN SITE A Address	Zone	Gross Land SF/ Acres	FAR	Bulk	Maximum Building SF by City FAR	OSPCD	Proposed Component Grouping	Size Compatible Components	Distance to Proposed Rail Line	Parking Regulations	Required Component Parking	SF required for Component Parking (350 SF per space)
Public Safety Block	228 Washington Ave 261 Somerville Ave 269 Somerville Ave	TOD 70	80,184	3.5 (4 Green)	Maximum ground coverage: 80% Maximum height: 55ft (70 ft Green)	280,644 320,736 (Green)	CH&L	CHO, L (91,195)	All (CHO, L, SA, DPW, SPD, SFD)	0.2 Miles – Union Square 0.3 Miles – Washington Street 0.6 Miles – Gilman Square	The new TOD zone does not have parking requirements for city- owned buildings; The closest use would be "office" which is: TOD 1 per 1000sf ; HOWEVER, a library it could be considered a "Educational, Recreational Institutional Service" which is: TOD 1 per 500 sf	102 98 (20% transit proximity reduction [TPR])	42,559 34,047 (TPR)
		CCD55	30,513	3	Maximum ground coverage: 80% Maximum height: 55ft	91,540	CH&L	CHO, L (91,195)	All (CHO, L, SA, DPW, SPD, SFD)	0.2 Miles – Union Square 0.3 Miles – Washington Street 0.6 Miles – Gilman Square	The new CCD zone does not have parking requirements for city- owned buildings; The closest use would be "office" which is: CCD 1 per 800 sf HOWEVER, a library it could be considered a "Educational, Recreational Institutional Service" which is: CCD 1 per 400 sf	152 122 (TPR)	53,198 42,559 (TPR)
Kiley Barrel Site	20-30 Prospect Street 258 and 264-266 Somerville Avenue 4, 9 and 10 Milk Place 8, 14 and 16-20 Bennett Street 0 Prospect Street (city owned parking lot)	TOD 100	42,945	3.5 (4 Green)	Maximum ground coverage: 80% Maximum height 85ft (100ft Green)	150,308 171,780 (Green)	CH; no L	CHO, L (91,195)	Any (CHO, L, SA, DPW, SPD, SFD)	0.1 Miles – Union Square 0.4 Miles – Washington Street 0.6 Miles – Gilman Square	The new TOD zone does	131 105 (TPR)	45,779 36,623 (TPR)
Waste Transfer Facility	10 Poplar St.	IA	91,616	2	Maximum ground coverage: 80% Maximum height 50ft	183,232	PS	CHO, L, SPD, SFD (152,607)	Any (CHO, L, SA, DPW, SPD, SFD)	0.3 Miles – Washington Street 0.6 Miles – Union Square	Non recreational public facilities 1 per each 600 s.f. of floor area open to the public Office use is 1 per each 500 s.f.	275	96,161

Burger King/John's Auto Sales	185 Somerville Ave.181 Somerville Ave.254A Medford St.254B Medfor St.	CCD 55	40,985	3	Maximum ground coverage: 80% Maximum height 55ft	122,955	Fonly	SFD (10,212)	SFD, SA	0.3 Miles – Union Square 0.3 Miles – Washington Street	The new CCD zone does not have parking requirements for city- owned buildings; The closest use would be "office" which is: CCD 1 per 800 sf HOWEVER, a library it could be considered a "Educational, Recreational Institutional Service" which is: CCD 1 per 400 sf	25	8,750
Pat's Auto/U-haul	165 Linwood St.	IA	38,394	2	Maximum ground coverage: 80% Maximum height 50ft	76,788	PS	SFD, SPD (61,212)	Any (CHO, L, SA, DPW, SPD, SFD)	0.2 Miles – 0.5 Miles – Union Square	Non recreational public facilities 1 per each 600 s.f. of floor area open to the public Office use is 1 per each 500 s.f.	102	35,707
Vacant Somerville Ave. Site	515 Somerville Ave.	ВА	46,852	2	Maximum ground coverage: 80% Maximum height 50ft	93,704	PS		Any (CHO, L, SA, DPW, SPD, SFD)	0.8 Miles – Union Square 0.9 Miles – Gilman Square 0.9 Miles – Lowell Street	Non recreational public facilities 1 per each 600 s.f. of floor area open to the public Office use is 1 per each 500 s.f.	34	11,667
DPW's Existing Site	1 Franey Road	IA	260,260	2	Maximum ground coverage: 80% Maximum height 50ft	520,520	PS	DPW (71,996)	All (CHO, L, SA, DPW, SPD, SFD)	0.4 Miles – Lowell Street 0.4 Miles – Ball Square	Non recreational public facilities 1 per each 600 s.f. of floor area open to the public Office use is 1 per each 500 s.f.	276	96,600
Homans Building	350 Medford St.	ВА	48,296/1.1 Acres	2	Maximum ground coverage: 80% Maximum height 50ft	96,592	PS	CHO (61,195)	Any (CHO, L, SA, DPW, SPD, SFD)	0.1 Miles – Gilman Square 0.7 Miles – Lowell Street	Non recreational public facilities 1 per each 600 s.f. of floor area open to the public Office use is 1 per each 500 s.f.	173	60,454
North Point Property	No address (MBL: 117-A-2 and 117-A-3)	IB	222,156/5.1 Acres	2	Maximum ground coverage: 80% Maximum height 50ft	444,312	PS	DPW (71,996)	All (CHO, L, SA, DPW, SPD, SFD)	0.4 Miles – New Leachmere 1.0 Miles - Washington Street	Non recreational public facilities 1 per each 600 s.f. of floor area open to the public Office use is 1 per each 500 s.f.	275	96,161

Department	Abbreviation	SF	Average Daily Visitors	Employees
City Hall Offices	СНО	66,215	706	347
Library	L	45,018	500	17
School Admin	SA	13,314	157	134
Public Works	DPW	71,996	65	94
Police Department	SPD	51,000	91	149
Fire Department	SFD	5,805	20	10
Total Space		271,848		

Appendix F: SCENARIO ASSESSMENT MATRIX

APPENDIX F: SCENARIO ASSESSMENT MATRIX

	ASTER PLAN S		Address	Manimum	Secondaria II.e.	Distance to Dramaged	
Scenario	Site Name	Scenario Use	Address	Maximum Building SF by City	Scenario Use Building SF	Distance to Proposed Rail Line	
1.) UNION SQUARE	Public Safety Block	City Hall and Library	228 Washington Ave 261 Somerville Ave 269 Somerville Ave	372,184 412,276 (Green)	108,800	0.2 Miles – Union Square 0.3 Miles – Washington St 0.6 Miles – Gilman Square	 Significant positive economic ir This location will be compatible Municipal uses be highly comp
	Waste Transfer Facility	Public Safety	10 Poplar St.	183,232	56,805	0.3 Miles - Washington St 0.6 Miles – Union Square	 surrounding area This scenario creates a significa pending soil conditions Kiley Barrel Site will require cle The proposed location of the P prime private redevelopment si development plan for Brickbott The Waste Transfer Site will red
2.) UNION SQUARE ALTERNATIVE	Kiley Barrel Site	City Hall and Library	20-30 Prospect Street 258 and 264-266 Somerville Avenue 4, 9 and 10 Milk Place 8, 14 and 16-20 Bennett Street 0 Prospect Street (city owned parking lot)	150,308 171,780 (Green)	108,800	0.1 Miles – Union Square 0.4 Miles – Washington St 0.6 Miles – Gilman Square	 Significant positive economic ir This location will be compatible Municipal uses be highly comp surrounding area Kiley Barrel Site will require cle This scenario creates a significa current Public Safety building The proposed location of the P prime private redevelopment si
	Waste Transfer Facility	Public Safety	10 Poplar St.	183,232	56,805	0.3 Miles - Washington St 0.6 Miles – Union Square	development plan for Brickbott
3.) HOLMAN'S BUILDING	Homan's Building	City Hall and Library	350 Medford St.	96,592	108,800	0.1 Miles – Gilman Square 0.7 Miles – Lowell Street	 Locating both the Library and t building program for those con
	Public Safety Block	Public Safety	228 Washington Ave 261 Somerville Ave 269 Somerville Ave	372,184 412,276 (Green)	56,805	0.2 Miles – Union Square 0.3 Miles – Washington St 0.6 Miles – Gilman Square	 than is currently permissible Same economic impact on the s Holman building may not be re Proximity to existing City Hall, municipal use Significant grade change and rat The proposed location of the P public safety uses as they current
4.) WASTE TRANSFER SITE	Waste Transfer Facility	City Hall, Library and Public Safety	10 Poplar St.	183,232	165,605	0.3 Miles - Washington St 0.6 Miles – Union Square	 Moderate economic impact due Municipal uses will have a low of McGrath Highway offers high a The Waste Transfer Site will red The proposed location of the coccupying a prime private redev Highway and the development

Evaluation Notes

: impact due to central location in Union Square ble for public safety uses as they currently exist at this location npatible to residential, retail and commercial uses in

cant private development opportunity on the Kiley Barrel site

clean up to an undetermined degree

Public Safety facilities in this scenario could be occupying a site depending on the future of McGrath Highway and the ottom

require clean up to an undetermined degree

impact due to central location in Union Square

ble for public safety uses as they currently exist at this location npatible to residential, retail and commercial uses in

clean up to an undetermined degree

cant private development opportunity on the site of the

Public Safety facilities in this scenario could be occupying a site depending on the future of McGrath Highway and the ottom

d the City Hall at this location would require either a reduced components or zoning variance to allow more square footage

ne surrounding area as the current City Hall e reusable due to seismic code concerns

all, High School and Library property presents opportunity for

rail line create barrier to existing City Hall complex

Public Safety facilities in this scenario will be compatible for rently exist at this location

lue to industrial nature of location along McGrath Highway w compatibility to existing industrial uses in surrounding area th automobile accessibility

require clean up to an undetermined degree

combined municipal facility in this scenario could be levelopment site depending on the future of McGrath at plan for Brickbottom

Department	Abbreviation	SF	Average Daily Visitors	Employees
City Hall Offices	СНО	66,215	706	347
Library	L	45,018	500	17
School Admin	SA	13,314	157	134
Public Works	DPW	71,996	65	94
Police Department	SPD	51,000	91	149
Fire Department	SFD	5,805	20	10
Total Space		271,848		

Appendix G: FINANCIAL ANALYSIS

Somerville Combined Facility Analysis Union Square Project Example

Assumptions:

Based on municipal facilities plan for City Hall office concept combined with main Library Additional commercial development [office and retail] to fill out block Projects supported by structured parking facility that supplies parking to meet zoning requirements for uses Conceptual cost estimates assumed for purposes of present analysis Tax and bond rates remain constant Property values are based on current Assessed Values or Construction Values

Program Concepts:

All development is within the current zoning envelope

Program includes; 66,215sf for City Hall, 42,800sf for Library, and 123 parking spaces

Private Development to include 200,000sf for Commerical Office, 25,000sf for Retail, and structured parking

COSTS	Public	c Project	Private Developm	ent Project
	Land Acquisition \$ 2	2,703,400	\$4,000,000	
	Building Construction \$ 27	7,066,355	\$66,375,000	-
	Structured Parking \$ 4	4,375,000	\$7,875,000	-
	Soft costs \$ 2	2,165,308	\$5,310,000	-
	Totals \$ 36	5,310,063	\$83,560,000	-
SOURCES				
	-	5,310,063		
Р	Proceeds from Sale of Public Properties			
_	Example: Homans Building 💲 (6	5,224,900)		
G	Grant funds for Library \$ (1	1,000,000)		
R	Remaining Construction Bond \$ 29	9,085,163		
Y	/early Net Property Taxes \$	-	\$ 1,571,801	<u>.</u>
CAPITAL BO	ND PAYMENTS AND TAXES			
R	Remaining Construction Bond \$ 29	9,085,163		
В	Bond Terms			
	Term (years) 20			
	Rate 4.00%			
	Loan Interest Rate 4.25%			
E	Estimated Bond Payments		Private taxes	Cost after projected private project taxes
	1st Year \$ 2	2,690,378	\$ 1,571,801	\$ 1,118,576
	10th Year \$ 2	2,072,318	\$ 1,571,801	\$ 500,517
		1,516,064	\$ 1,571,801	\$ (55,737)



THE CECIL GROUP, INC. ARROWSTREET, INC.