

MEMORANDUM

TO: Needham Planning Board
FROM: Katie King, Deputy Town Manager
SUBJECT: Capital Impacts Assessment of Proposed MBTA Communities Act Zoning
DATE: September 25, 2024

Methodology for Capital Impacts Assessment

One component of the Housing Needham (HONE) Advisory Group's charge was to "evaluate build-outs, projections, and analyses of fiscal, school enrollment, and infrastructure impacts provided by staff and consultants." The Town's consultant, RKG Associates, projected the likely number of housing units and school-aged children under each zoning scenario.

Table 1. Likely and maximum build out under each plan including units, students, and residents.

RKG Projections (updated 09/19/2024)	Units	Students	Residents¹
Base Compliance Plan: Likely Build	411	55	637 – 1,233
Base Compliance Plan: Full Build	1,870	236	2,899 – 5,610
Neighborhood Housing Plan: Likely Build	1,288	164	1,996 – 3,864
Neighborhood Housing Plan: Full Build	3,296	415	5,109 – 9,888

Table 2. Existing unit capacity compared to proposed zoning.

Existing Units	Existing Zoning As of Right Unit Capacity	Existing Zoning with Overlay Special Permit Unit Capacity	Base Compliance Plan Unit Capacity	Neighborhood Housing Plan Unit Capacity
775	1,019	1,636	1,870	3,296

Town departments, including the Finance Department, Needham Public Schools, Department of Public Works (including Engineering, Highway Division, and Water, Sewer, and Drains Division), Building Department, Police Department, and Fire Department, reviewed the RKG Associates analyses to assess potential capital impacts of the zoning.

Staff compared anticipated development growth, including projected number of housing units, student enrollment, and population growth, with known Town capital infrastructure needs. Departments assessed anticipated impacts on capital projects that are already being planned for² and new capital projects that may result from development under the zoning scenarios, informed by their professional expertise and the source documents cited in this memo. The conclusions from those departmental

¹ Resident estimates are based on a low and high assumption of people living in each unit type: Studio with 1–2 people, one-bed with 1-2 people, two-bed with 2-4 people, and 3-bed with 3–5 people. These were then applied to RKG Associates' build out assumptions of 10% studios, 45% one-beds, 35% two-beds, and 10% three-bed units.

² FY2025-2029 Capital Improvement Plan: <https://needhamma.gov/5495/FY2025-2029-Capital-Improvement-Plan>

reviews follow, with the exception of the Needham Public Schools, which are addressed in a memo to the Planning Board dated 09/20/2024. The Town will begin its FY2026 budget process later this fall. Capital project requests referenced in this memo reflect the Town's FY2025 – 2029 Capital Improvement Plan.

POLICE & FIRE

Background: The Town of Needham has recently made significant investments in the capital needs of the Police and Fire Departments. The Town opened a new Fire Station 2 in Needham Heights, at the intersection of Highland Avenue and Webster Street, in the Fall 2021. The Public Safety Building on Chestnut Street, which houses the Needham Police Department and Fire Station 1, opened in 2022. These stations are near the areas proposed for multi-family housing zoning. The Fire Department's vehicles and apparatus can serve the height and density of the buildings that would be allowed under the proposed zoning, as buildings of this size (and larger) exist in town.

Conclusion: Needham Police and Needham Fire do not anticipate any significant impact on their current operations. There may be a need for a small increase to staff over time as the Town's population grows, which is something that both departments monitor regularly. There are no anticipated public safety capital needs (e.g., new stations or equipment) because of these proposals.

Proposed developments would be required to comply with all fire code and building codes. Under Massachusetts Building Code, new multi-family buildings with three or more units will be required to have fire sprinklers. To properly design the system, the project applicant must ascertain, through flow tests, that there is sufficient water available for the system to work. If the flow tests show there is not, the applicant must identify alternatives, such as an on-site water tank, to ensure the fire suppression system meets code.

DEPARTMENT OF PUBLIC WORKS (DPW)

The DPW does not anticipate that the proposed MBTA zoning will result in a need for new capital projects to expand existing water or sewer capacity for the following reasons:

- The proposed areas for rezoning are already developed and have existing water and sewer infrastructure throughout to support buildings with residential, medical, retail, restaurant and commercial uses.
- The main factors that will drive the need for Town capital investments are the age and condition of the existing infrastructure. When those projects are undertaken, new or anticipated development would be factored into the project scope.
- Under site plan review, all proposed developments must show there is adequate water, sewer, and utility service provided to serve the project. The Executive Office of Housing and Livable Communities' guidelines state that "compliance with Section 3A does not require a municipality to install new water or wastewater infrastructure, or add to the capacity of existing infrastructure, to accommodate future multi-family housing production within the multi-family zoning district."³ The Town is not required to shoulder any capital investment needed to make a specific project viable.
- At some sites, new housing development may reduce pressure on the Town's water, sewer, and drain systems due to a change in use and/or the benefits of new developments being required

³ Executive Office of Housing and Livable Communities, *Compliance Guidelines for Multi-family Zoning Districts Under Section 3A of the Zoning Act*, August 17, 2023. <https://www.mass.gov/info-details/section-3a-guidelines>

to meet more stringent local requirements to reduce infiltration and inflow, increase energy efficiency, and manage stormwater on-site compared to when the existing buildings were built.

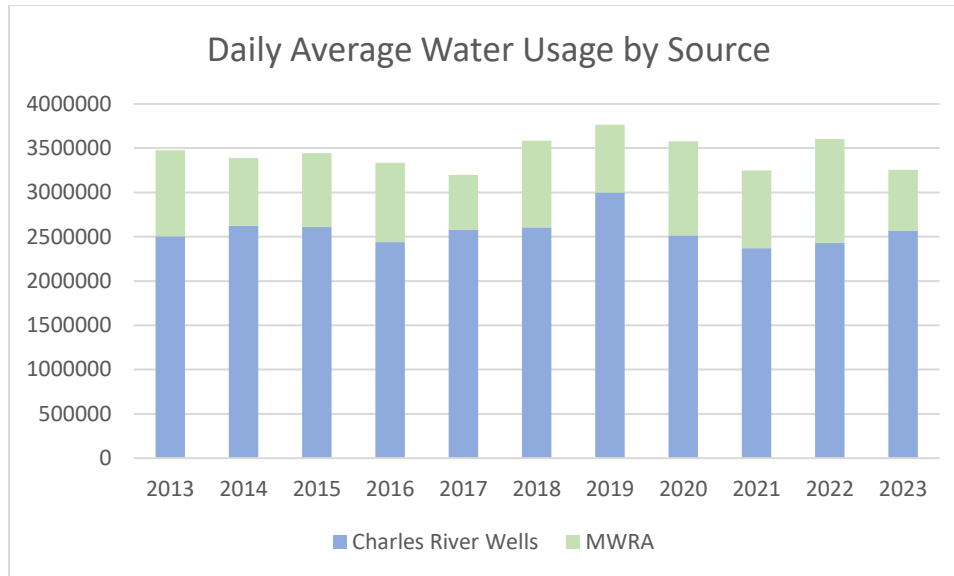
DPW is both proactive in its planning around potential development and reactive to each development as they are built. DPW has several plans to investigate and manage the Town's infrastructure through master plans in the next 1-3 years for transportation, sewer, water, and drainage. These plans will provide the department with a comprehensive study of the age and condition of our infrastructure, identify locations for needed replacements and upgrades, and inform the prioritization of these projects. DPW will also be undertaking drainage, sewer, and transportation projects in the plan areas in upcoming years. The funding needed for these plans and anticipated projects are detailed below. These projects are necessary given the current conditions and any changes in zoning will be factored in to adjust the project scopes, as needed.

WATER

Background: The Town's water distribution system is a single service pressure zone system supplied by two sources. The Town's primary source of water is the Charles River Well Field. The well field consists of three groundwater-pumping stations. Needham's second water source is a connection to the Massachusetts Water Resources Authority (MWRA) surface water supply originating at the Quabbin Reservoir and delivered through the Metrowest Tunnel and the Hultman Aqueduct. This water is pumped into the Needham system at the St. Mary's Pumping Station located at the corner of St. Mary Street and Central Avenue. This supply is used when the Town's demand for water is greater than the local supply and serves as a backup should the Town's wells need to be taken off-line. The Town can be supplied 100% of its water through the MWRA, if necessary.

Water Division staff operate the water treatment plant and operate, maintain, and repair the townwide water distribution system. The system is comprised of more than 143.5 miles of water mains, 1,344 public and private hydrants, 3,231 water gate valves, and 10,294 water service connections. This system supports 15,714 installed meters as of September 2024. The Water Enterprise Fund operating budget is a self-supporting account. Water user fees and charges cover the entire cost of operations.

The components of the Town's infrastructure that most limit water distribution capacity are the pump stations, which are designed to handle 7 million gallons per day (mgpd). The State can also set limits on local water production based on drought conditions, conservation policies, etc. Between 2013 – 2023, the Town's average daily water usage has ranged from 3.2 mgpd - 4.4 mgpd and averaged 3.7 mgpd. In the winter months, the average is 2.3 - 2.6 mgpd. Overall water usage increases substantially in the summer months due to irrigation/landscaping. Days that exceed 6 mgpd are due to outdoor watering. On average, 75% of the Town's water has been generated locally and 25% provided by the MWRA.



Source: Town of Needham Department of Public Works; Division of Water, Sewer, and Drains, 2024

The Town has been investing in the Town’s water treatment, storage, and distribution systems over the past several years and the work continues. Planning is underway to add redundancy to Needham’s water system. Town Meeting appropriated design funding in FY2024 to create a fourth well at the Charles River Well Field, to add reliability to the Town water supply. The MWRA is also advancing their Metropolitan Water Tunnel Program to create redundancy of the water distribution system to the Metropolitan Boston area.

FY25 - 29 Water Capital Project Requests:

Project	FY25	FY26	FY27	FY28	FY29
Water Distribution Master Plan		\$300,000			
Water Supply Development (creation of 4 th Town well)		\$3,000,000			
Replacements: Mills Road from Sachem to Davenport; and Mayo Avenue from Harris to Great Plain		\$50,000	\$470,000		
Replacement: Kingsbury Street from Oakland to Webster			\$122,000	\$555,000	
Replacement: Oakland Avenue from May to Highland				\$380,000	\$500,000

Conclusion: The Town believes it has enough water capacity to support housing developments that may result from the proposed zoning. Needham has capacity in its local water supply in the off-season and augments that local supply with additional water available through the Massachusetts Water Resources Authority. Irrespective of this zoning, the Town is working on redundancy systems for its local water supply and the MWRA is undertaking a redundancy project for their regional supply system.

DPW has requested \$300,000 in FY2026 for a water distribution system master plan to study and prioritize potential water distribution system improvements townwide. This study will inform future

water capital projects and how they will be prioritized. At this time, DPW does not anticipate any new capital projects resulting from the proposed zoning, but may adjust the scope of projects (e.g., replace with a larger diameter pipe) to factor in any anticipated population growth.

For a specific development, the property owner/developer would be required to pay for the materials and construction to connect the pipes from their building into the existing water system. They must show there is adequate water, sewer, and utility service provided to serve the project.

SEWER

Background: The Town's sewage collection system consists of more than 130 miles of collector and interceptor sewers, 3,700 sewer manholes, and ten sewer pump stations. The Town's sewer system is a collection system that discharges its wastewater to the MWRA system for treatment. Approximately 65% of the Town's sewer collection system is a gravity-only system, and 35% of the sewer system is pumped into the gravity system. Needham has two principal points of discharge into the MWRA system and nineteen other public locations where subdivisions discharge to the MWRA system. DPW personnel maintain and operate 24 sewer pumps, motors, switchgear, gates, valves, buildings, and grounds contained in ten pumping facilities located throughout Town. The Sewer Enterprise Fund budget is a self-supporting account. Sewer user fees and charges cover the cost of the sewer operations.

The Town has been preparing for several major sewer system infrastructure replacement and upgrade projects. As noted in *Needham 2025: Commercial and Residential Growth Impact Study*, "Overall, the current sewer system is reliable and can accommodate development on either side of I-95."⁴ However, the study noted the largest challenge facing Needham's current sewer capacity and reliability is existing deficiencies with the Greendale Avenue/Route 128 sewer interceptor from Cheney Street to Great Plain Avenue. This is a trunk sewer that collects and conveys wastewater from numerous surrounding sewer lines and plays a critical role in the operation of the Town's sewer system. The existing interceptor sewer line is deteriorating and in need of rehabilitation to remain functional. This multi-phase project would consist of replacing or relining the 12,000 feet (2.5 miles) of 18-inch reinforced concrete gravity sewer main. Design funding was provided in FY2023, and Phase 1 of construction is currently underway, funded via the American Rescue Plan Act (ARPA). Town Meeting appropriated \$13.6 million at the 2024 Annual Town Meeting to begin Phase 2 in FY2025. Due to the investment required to complete the remaining phases, the Town intends to apply for several sources of outside funding (including MWRA and MassDEP programs) to reduce the local funding required.

The Town of Needham is also under Administrative Orders from MassDEP to identify and remove Infiltration and Inflow (I/I) in its existing sewer systems. I/I is groundwater and stormwater that enters the sewer system, rather than into stormwater drains, limiting the capacity to process sewer wastewater. Failure to address I/I will result in increases to the percentage of sewer costs from the MWRA borne by the Town as well as additional administrative requirements. The Town completed a study in 2016 that identified target areas for I/I removal over the next ten years. DPW has been undertaking these projects using funds appropriated at Town Meeting, supplemented by funding from private development and grant funding secured from the MWRA, and all projects identified in the 2016

⁴ Needham 2025: Commercial and Residential Growth Impact Study, prepared for the Town by Urban Partners, June 30, 2020. <https://needhamma.gov/DocumentCenter/View/22924/Needham-2025-Report-Final-Compressed?bidId=>

study have been completed. DPW has requested \$1M in FY2026 to formulate a new plan and cost estimates for the continuation of the I/I removal program. Most of the funding for the implementation of this updated plan will be sourced from private entities and developments, as required by the Town's Sewer System Impact Program Regulations.⁵

American Rescue Plan Act (ARPA) Project	Amount
Sewer Main Replacement: 128-Interceptor Phase 1 (CY2024)	\$3,000,000

FY25 - 29 Sewer Capital Project Requests:

Project	FY25	FY26	FY27	FY28	TBD
128-Interceptor Phase 2: Kenney Street to Valley Road at Norwich Road	\$13,600,000				
128-Interceptor Phase 3					\$14,000,000
128-Interceptor Phase 4					\$6,000,000
Cooks Bridge Sewer Pump Station Replacement		\$195,000	\$3,900,000		
Sewer System Infiltration & Inflow Assessment		\$1,000,000			

Conclusion: Sewer infrastructure is in place throughout the areas proposed for rezoning. DPW has requested \$1M in FY2026 for a townwide sewer system infiltration and inflow assessment to identify priority capital projects with cost estimates. At this time, DPW does not anticipate any new sewer capital projects resulting from the proposed zoning but may adjust the scope of priority projects identified in the I/I assessment if they fall in the area of the proposed rezoning. Current conditions require the Town's investment in rehabilitating the Rt.128 sewer interceptor. The proposed zoning will not impact the scope, timeline, or estimated cost of that project.

Individual housing developments will be subject to DPW's Sewer System Impact Program Regulations to reduce Infiltration and Inflow, thereby decreasing the volume of water processed through the sewer system. Applicants must show there is adequate sewer service provided to serve the project.

STORMWATER

Background: The DPW Water, Sewer, and Drains division oversees the collection and transportation of stormwater (drains program) originating from rain and snowstorms for discharge into streams, brooks, rivers, ponds, lakes, flood plains and wetlands throughout Town. The Town's drainage infrastructure consists of approximately 100 miles of various size drainage pipes, 4,300 catch basins, 1,500 drainage manholes, and 295 drainage discharges. DPW's oversight includes managing both the quality and the quantity of stormwater in Needham. In terms of quality, stormwater and associated discharges are now considered by the federal government as potentially contaminated and have come under increasingly severe discharge performance standards. The intention is to reduce or eliminate contaminants contained in the flow washed from ground surfaces considered to be harmful to the environment. In terms of quantity, Needham has experienced increased levels of flooding during intense rainfall events.

⁵ DPW Sewer System Impact Program: <https://www.needhamma.gov/DocumentCenter/View/25715/Sewer-System-Impact-Program-Requirements-Final-2016>

The Town is focused on strengthening infrastructure, protecting critical assets, and educating residents about flood protection best practices. The Town is looking at two sets of strategies for stormwater management. The first are the system-wide improvements needed in the Town's stormwater drainage system. The second are site-specific improvements required of developments under the Town's Stormwater Bylaw.⁶

For system-wide improvements, 2024 Annual Town Meeting appropriated \$250,000 in Public Works Infrastructure funds to supplement \$250,000 in ARPA funds to support a Stormwater Plan that would evaluate the capacity and condition of the existing townwide stormwater drainage system. The plan will identify, prioritize, and address the health and safety, regulatory, and capacity concerns associated with the management of stormwater. It will also provide estimates for the financial investments that would be required for the construction and maintenance of future storm drain improvement projects, including storage areas for discharge (e.g., retention ponds, underground vaults, dry wells).

The Stormwater Plan will be closely tied to the ongoing master planning of the Town's brooks and culverts, which function as another important component of the stormwater network capacity by controlling the flow of surging water during heavy rains/storms. Destructive flooding in the summer of 2023 continued a pattern of increasingly erratic weather that is expected to worsen over time, further illustrating the need to continuously maintain and improve stormwater management infrastructure through holistic planning.

In addition to the capacity and resiliency considerations, the Stormwater Plan would allow the Town to identify ways to improve surface water quality by mitigating pollutants through the stormwater drainage system. This portion of the Stormwater Capacity Plan would assist the DPW in their efforts to comply with standards set by the National Pollutant Discharge Elimination System (NPDES) permit. To meet these permit obligations, the Town must increase its investment in stormwater infrastructure management.

In April 2023, the Needham Select Board approved a Stormwater Utility Fee Program,⁷ which will spread the cost of this public service. Properties in Needham which have more than 200 square feet of impervious surface incur a stormwater utility assessment included in water/sewer bills. Impervious surfaces are hard areas such as roofs, concrete, asphalt driveways, and patios that do not allow water to soak into the ground easily. Instead, water runs off the impervious surfaces, and then flows into a storm drain or a nearby body of water taking with it everything on that surface (pollution, trash, animal waste, etc.). Properties with more impervious surface create more runoff and have a larger impact on water quality and quantity, therefore the fee charged is related to the amount of impervious area on the property. As every property generates runoff and benefits from a stormwater program, the utility model is a recommended method of collecting revenue from those who place a demand on the stormwater management system. The revenue generated by the stormwater utility fee will be used to manage and upgrade our Town's public stormwater drainage system to enhance stormwater quality as required in the Town's NPDES permit.

⁶ Needham General Bylaws Article 7, <https://www.needhamma.gov/DocumentCenter/View/17787/Stormwater-By-Law-OTM-for-warrant-9192018-Clean-FINAL?bidId=>

⁷ Stormwater Fee: [https://www.needhamma.gov/5548/Stormwater-Utility-Fee?ct=t\(EMAIL_CAMPAIGN_5_25_2021_14_31_COPY_01\)](https://www.needhamma.gov/5548/Stormwater-Utility-Fee?ct=t(EMAIL_CAMPAIGN_5_25_2021_14_31_COPY_01))

Site-specific improvements required of developments fall under the Town’s Stormwater Bylaw, which requires new construction to collect and infiltrate 1-inch of water runoff from the roof. If a new building is located on a site with more than 4,000 square feet of impervious surface, that development is required to ensure that there is no impact from water runoff to abutting properties. The original focus of the Town’s Stormwater Bylaw was on water quality and reducing pollutants. The Select Board has appointed a Stormwater Bylaw Working Group⁸ to make recommendations for revisions to the Town’s bylaws to strengthen requirements related to stormwater capacity. Recommendations from this working group are anticipated in 2025. Efforts to educate and encourage the designing of new buildings and the hardening of existing buildings against flood risk are ongoing.

American Rescue Plan Act (ARPA) Project	Amount
Town Reservoir sediment removal	\$2,150,000
Walker Pond Improvements	\$750,000
Rosemary Lake Sluiceway Replacement	\$120,000

FY25 - 29 Stormwater Capital Project Requests:

Project	FY25	FY26	FY27	FY28	FY29
NPDES Support Projects		\$816,000	\$987,000	\$1,200,000	\$1,200,000
Public Works Infrastructure: Storm Drain Capacity	\$250,000				\$250,000
Public Works Infrastructure: Brooks & Culverts	\$225,000		\$1,100,000	\$250,000	

Conclusion: As projected flood risk continues to increase, addressing stormwater quality and capacity will be a Town priority for the foreseeable future. There has been flooding throughout Needham, including in some of the areas proposed for multi-family housing zoning. DPW has a variety of stormwater improvement projects⁹ completed, in process, and planned throughout town. These and future investments will be informed by a townwide master plan and individual project scopes will be adjusted based on any zoning changes.

Housing developments under this proposed zoning are subject to the Town’s Stormwater Utility Fee and Stormwater Bylaw, and to any future amendments of the Stormwater Bylaw adopted by Town Meeting to strengthen on-site requirements for stormwater retention. New developments will also be subject to local and state wetlands regulations and the Town’s Flood Plain District requirements.

ROADWAYS

Background: The Town engaged GPI to conduct a traffic analysis to assess the impacts of the HONE Working Group’s April 2024 recommended zoning proposals.¹⁰ GPI analyzed 15 key intersections in the plan area. They took existing traffic conditions and applied an annual growth rate of 1% per year compounded, to project anticipated traffic conditions in 2034, assuming that there was no additional

⁸ Stormwater Bylaw Working Group: <https://www.needhamma.gov/5492/Stormwater-By-Law-Working-Group>

⁹ <https://www.needhamma.gov/5527/Town-Stormwater-Projects>

¹⁰ GPI, MBTA Communities Traffic Impact Analysis, July 19, 2024, <https://www.needhamma.gov/DocumentCenter/View/46197/2024-08-23-Traffic-Analysis>

development. The traffic operations analysis used conservative rates for growth rate, trip generation, and mode share (cars vs. walk/bike/transit) to present a worst-case scenario.

GPI then compared this “no build” scenario with anticipated traffic conditions in 2034 under Scenario A, the Base Compliance Plan likely build out of 222 units, and again under Scenario B, the Neighborhood Housing Plan likely build out of 1,099 units. GPI concluded that Scenario A (Base Compliance) is expected to have little to no impact compared to the “no build” scenario, while Scenario B (Neighborhood Housing Plan) is expected to cause localized impacts at key intersections (i.e. Chestnut Street at Great Plain Ave and Highland Avenue at West Street) if no mitigation measures are taken.

GPI then identified potential mitigation measures that could be applied to the intersections with unacceptable levels of service, including signal timing optimizations, roadway restriping, adjustments to pedestrian timings, and new signalization. GPI concluded that, with recommended mitigation measures, the traffic system will maintain an acceptable level of service under both Scenario A (Base Compliance) and Scenario B (Neighborhood Housing). Despite increased traffic volumes, intersections will operate within acceptable level of service thresholds; mitigation measures would ensure efficient traffic flow, supporting the planned development.

GPI recommended mitigation strategies for 9 of the 15 intersections included in the study. Of those, the Department of Public Works is currently working on capital projects that would address 7 of those 9 intersections: a redesign of Great Plain Avenue from Linden Street to Warren Street and Highland Avenue between Webster Street and Great Plain Avenue. The goals for these roadway improvement projects are to design with a Complete Streets approach, to slow car speeds, better accommodate bicycles and pedestrians, and improve traffic flow. The redesign of Great Plain Ave will be funded by Chapter 90. A temporary pilot of the proposed concept design will be completed in 2025, with implementation anticipated in the summer of 2025. After successful completion and analysis of the pilot a design will be finalized, with construction planned for 2026-2027 pending funding availability. The Highland Avenue project is estimated in the next 5 – 7 years to be funded by the State’s Transportation Improvement Program (TIP). This project will be designed with Chapter 90 funds, with a goal of having construction funded by the TIP. The designs of both projects are in an early enough stage that they will incorporate the anticipated traffic volumes associated with any adopted zoning. The Town has been made aware that compliance with the MBTA Communities Act will be taken into consideration when state entities are evaluating projects for inclusion in their TIP programs.

DPW is currently partnering with the Metropolitan Area Planning Council (MAPC) to complete a Transportation Master Plan, anticipated by the end of 2025. This master plan will analyze Needham’s existing transportation infrastructure from a holistic perspective, not just in terms of infrastructure maintenance but also in terms of safety considerations, use patterns and traffic flows, community connectivity, walking and biking accommodations, and how to best bridge gaps. The plan will be a foundational document from which the Town’s Mobility Planning & Coordination Committee will establish transportation goals, set standards governing when and where to install bike lanes, identify target areas for improvement, and cost out solutions. The study will also investigate how the Town’s transportation network integrates with surrounding communities to improve multimodal connectivity throughout the region.

FY25 - 29 Roadway Capital Project Requests:

Project	FY25	FY26	FY27	FY28	FY29
Public Works Infrastructure: Street Resurfacing	\$1,700,000	\$1,800,000	\$1,900,000	\$2,000,000	\$2,000,000
Public Works Infrastructure: Sidewalks	\$995,000	\$1,100,000	\$1,100,000	\$1,200,000	\$1,200,000
Public Works Infrastructure: Intersection Improvements	\$1,100,000 Hunnewell at Central	\$1,300,000 Central at Great Plain	\$405,000 Central at Gould; Kendrick at 4	\$802,000 Central at Gould	\$250,000 Great Plain at Greendale

Conclusion: The GPI traffic analysis of the proposed zoning concluded that, with recommended mitigation measures, the traffic system will maintain an acceptable level of service under the Base Compliance Plan and the Neighborhood Housing Plan. DPW is in the design phase of two major roadway reconstruction projects (Great Plain Avenue and Highland Avenue) that would address 7 of the 9 intersections where GPI recommended mitigation strategies.

Improvements to Chestnut Street are not currently in the Town's FY25-29 capital improvement plan and may become a priority, depending on where multi-family development occurs. There has not been a feasibility study nor design of what a major roadway improvement project of this corridor would cost, but DPW has suggested \$10 - \$20 million as an order-of-magnitude estimate to undertake a major redesign of Chestnut Street, including drainage infrastructure, bicycle accommodations, wider sidewalks, new pavement, and other amenities.

The Town has also studied the build-out of additional segments of the Rail Trail, between High Rock Street to Needham Junction and from Needham Heights to Newton. Funding for these projects, or alternative networks of bicycle accommodations on our roadways, are not currently in the Town's FY25-29 capital improvement plan. Investing in the rail trail may become a higher priority with an increase in nearby transit-oriented development or if all towns along the trail align on project goals.

PARKING

Background: Needham's current zoning by-law requires 1.5 parking spaces per housing unit. The proposed zoning reduces that requirement to 1 parking spot per unit for multi-family residential uses in the overlay area only. This is informed by two parking studies: the Metropolitan Area Planning Council's Perfect Fit Parking study¹¹ and the Needham Center & Needham Heights Parking Study conducted for the Town by Stantec in 2023.¹²

MAPC has completed four phases of their study, conducting overnight weeknight parking counts at multi-family housing sites in Greater Boston to get data on peak parking utilization. Phases 1 and 2 examined nearly 200 sites and found that "only 70% of the off-street parking spaces provided at multifamily developments were occupied during peak hours (in the middle of the night), while Phase 3

¹¹ MAPC Parking Study: <https://perfectfitparking.mapc.org/>

¹² Stantec Parking 2023 Study: <https://www.needhamma.gov/5383/Needham-Center-and-Needham-Heights-Parki>

similarly found only 76% parking utilization during peak hours.” Needham participated in Phase 4 of the study, which focused on communities west of Boston (Bedford, Belmont, Brookline, Concord, Framingham, Lexington, Natick, Needham, Newton, Sudbury, Waltham, Watertown, and Wayland). Parking counts were conducted at 37 multi-family housing sites and concluded that the parking supply was 1.45 spaces/unit while the parking demand was 0.92 spaces/unit. This is a parking utilization rate of 62%. The data collected in Needham showed a parking utilization rate of 57%, with parking supply of 1.20 spaces/unit and parking demand of 0.57 spaces/unit.

As part of a comprehensive parking study undertaken by the Town of Needham, Stantec provided a zoning analysis comparing Needham’s requirements for parking in comparison to best practice national standards. In nearly all categories of land use, including residential, office, medical office, and retail, Needham’s zoning requirement is higher than the national standards. For residential developments, the national standard is 1.15 spaces per unit.

Conclusion: The parking requirement of a minimum of 1 space per unit is expected to be sufficient. A multi-family housing developer may choose to build additional parking, if they believe that a higher ratio is necessary to successfully rent or sell each unit based on market demand. The proposed zoning maintains the Town’s on-street overnight parking ban.

ENVIRONMENTAL

Housing more people in denser homes has net positives for the Town’s per-capita emissions. The areas that have been selected for rezoning are largely already developed and seek to promote “in-fill” development or redevelopment that takes advantage of the fact that there is already utility infrastructure and a pre-existing building footprint that limits the need to add additional impervious surfaces. In addition, increasing public transit ridership and reducing transit-related emissions is one of the goals of Needham’s Climate Action Roadmap, which is why revising local zoning requirements to ensure compliance with the MBTA Communities Act is one of the stated actions in the roadmap.

Neither the MBTA Communities Act nor the proposed local zoning override state or local environmental regulations. The Town’s existing bylaws (e.g., stormwater, floodplain, and wetlands) will still be applicable to any new development that occurs in these rezoned areas. This proposal does not rezone any Town-owned open space for housing.

Needham adopted the Opt-In Specialized Energy Code at the October 2023 Special Town Meeting, which took effect on July 1, 2024. Any new multi-family housing over 12,000 square feet will need to meet Passive House standards and any new multi-family housing under 12,000 square feet will need to be all-electric or, if using fossil fuel combustion systems, will need to provide pre-wiring for future appliances and HVAC electrification and install solar to offset energy usage.

Sources

1. Resident estimates are based on a low and high assumption of people living in each unit type: Studio with 1–2 people, one-bed with 1-2 people, two-bed with 2-4 people, and 3-bed with 3–5 people. These were then applied to RKG Associates’ build out assumptions of 10% studios, 45% one-beds, 35% two-beds, and 10% three-bed units.
2. Town of Needham, *FY2025-2029 Capital Improvement Plan*, January 2024. <https://needhamma.gov/5495/FY2025-2029-Capital-Improvement-Plan>
3. Executive Office of Housing and Livable Communities, *Compliance Guidelines for Multi-family Zoning Districts Under Section 3A of the Zoning Act*, August 17, 2023. <https://www.mass.gov/info-details/section-3a-guidelines>
4. Urban Partners, *Needham 2025: Commercial and Residential Growth Impact Study*, June 30, 2020. <https://needhamma.gov/DocumentCenter/View/22924/Needham-2025-Report-Final-Compressed?bidId=>
5. Town of Needham Department of Public Works Sewer System Impact Program: <https://www.needhamma.gov/DocumentCenter/View/25715/Sewer-System-Impact-Program-Requirements-Final-2016>
6. Needham General Bylaws Article 7, Stormwater Bylaw: <https://www.needhamma.gov/DocumentCenter/View/17787/Stormwater-By-Law-OTM-for-warrant-9192018-Clean-FINAL?bidId=>
7. Stormwater Fee: [https://www.needhamma.gov/5548/Stormwater-Utility-Fee?ct=t\(EMAIL_CAMPAIGN_5_25_2021_14_31_COPY_01\)](https://www.needhamma.gov/5548/Stormwater-Utility-Fee?ct=t(EMAIL_CAMPAIGN_5_25_2021_14_31_COPY_01))
8. Stormwater Bylaw Working Group: <https://www.needhamma.gov/5492/Stormwater-By-Law-Working-Group>
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10. GPI, MBTA Communities Traffic Impact Analysis, July 19, 2024, https://www.needhamma.gov/DocumentCenter/View/46197/2024-08-23_-Traffic-Analysis
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