A TECHNICAL ASSISTANCE PANEL REPORT

Revitalizing

Framingham Technology Park & 9/90 Corporate Center

Framingham, MA





September 6, 2012

ULI Urban Land Institute
Boston
Serving the Six New England States

Table of Contents

Executive Summary

Under the direction of the Urban Land Institute's Boston District Council, the Framingham Technical Assistance Panel (TAP) convened in Framingham in June, 2012, bringing together stakeholders, including Town, business, and community leaders, and a panel of land use and development professionals for two sessions focused on multiple aspects of the Framingham Technology Park and 9/90 Corporate Center (Tech Park Area) transportation infrastructure and development pattern.

Organized and sponsored by the Metropolitan Area Planning Council (MAPC), the TAP provided an opportunity for the MAPC to receive objective insight into their work to date on a year long planning work to develop local land use and transportation demand management (TDM) plans for use by private and public stakeholders in future decision making. The final TDM plans, being developed as part of a federally funded MetroFutures grant focused in part on opportunities for office and industrial park retrofit, will allow decision makers to prioritize transportation investments that mitigate roadway congestion and increase transportation mode choices, establish a framework for private sector development plans, and increase equitable employment opportunities

The report that follows, which summarizes the TAP recommendations, is comprised of five chapters.

Chapter 1: ULI and the TAP Process gives an overview of the Urban Land Institute's Boston District Council and its Technical Assistance Panels (TAPs) and provides a detailed list of participants in the Framingham TAP including Town officials, stakeholders, and the panel of land use and development professionals.

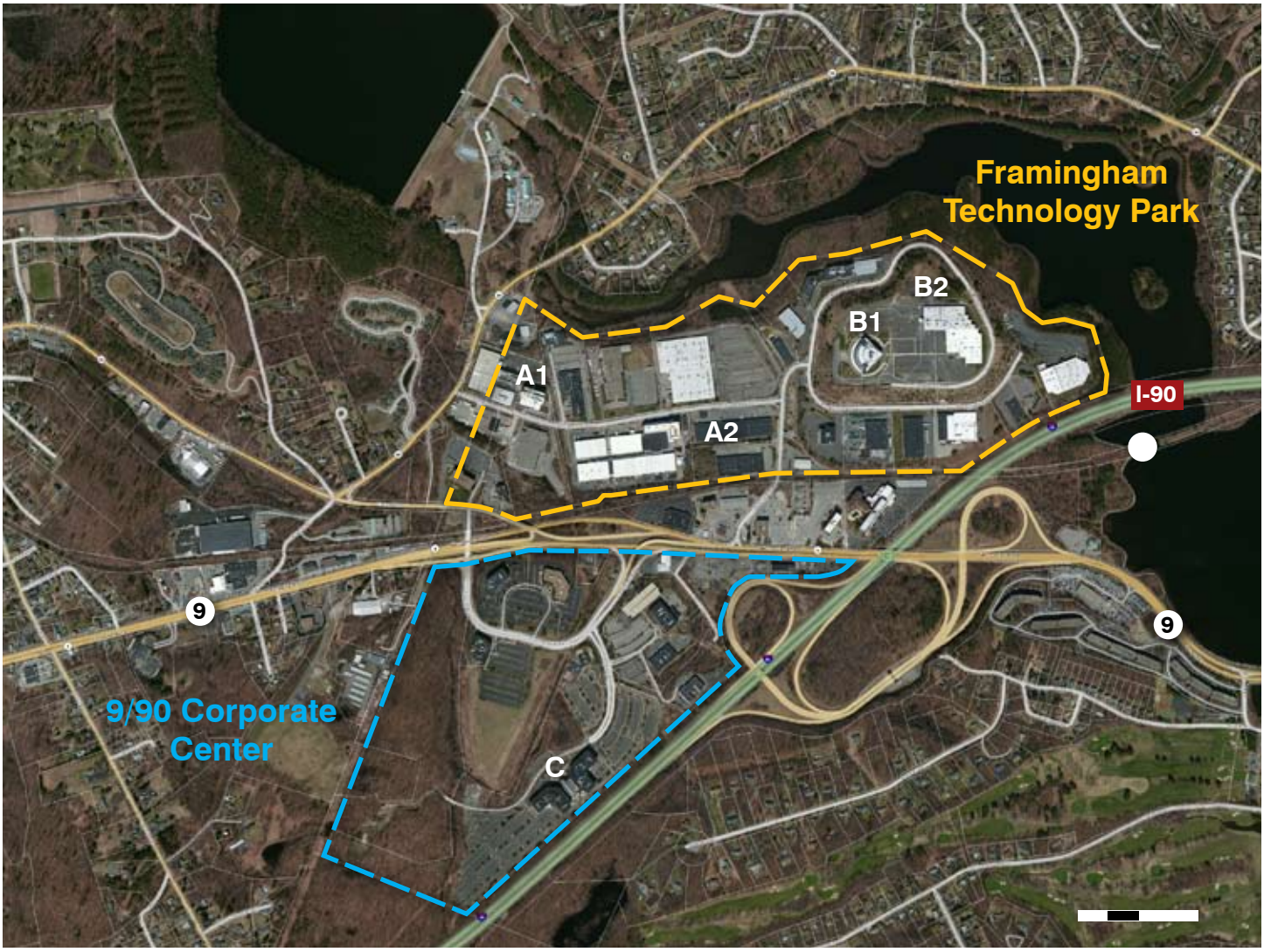
Chapter 2: Background and Assignment provides relevant background information about the Tech Park Study Area and its two office parks. Both benefit from the location relevant to Greater Boston and Greater Worcester employment centers and the location at the Route 9/ Interstate 90 interchange. However, lack of easy and accessible public transit is a factor limiting further growth. The chapter also reviews MAPC's objectives for the TAP.

Chapter 3: Observation & Findings presents the most significant insights that emerged from interviews with stakeholders and the panel's tour of the Study Area. These included traffic issues, specifically challenges posed by the intersection at Route 9 and California Avenue, commuting trends and challenges, and issues concerning pedestrian movement within each of the parks.

Chapter 4: Recommendations presents the panel's recommendations, which are organized under (A) Access to the Tech Parks and (B) Life within the Tech Park (with specific focus on the Framingham Tech Park). Improved access to the Study Area could facilitate further redevelopment in the Framingham Tech Park, which could potentially include mixed-use and residential components that would fundamentally—and positively—shift how the Framingham Tech Park functions. Mixed-use development would provide desired services and amenities for both future residents and existing employess, including restaurants and pedestrian friendly grounds. The chaptner also presents recommendations for improving the pedestrian environment in the shorter term.

Chapter 5: Next Steps provides recommended actions for stakeholders to pursue to address improving (1) access to the tech parks and (2) life within Framingham Tech Park.

Figure 1: Framingham Technology Park and 9/90 Corporate Center



Major Corporations

A1 Genzyme Science Center
A2 Genzyme Corporate Center
B1 Bose Corporate Center
B2 Bose R&D Center
C Staples

information depicted on this map is for planning purposes
. It is not adequate for legal boundary definition, regulatory
pretation, or parcel-level analyses.

luced by: MAPC
2012

Data Sources:
Roads and Train Tracks/Stations: Massachusetts
Department of Transportation (MassDOT)
Massachusetts Geographic Information System (MassGIS)
Massachusetts Department of Environment Protection (DEP)
Metropolitan Area Planning Council (MAPC)

1 | ULI & The TAP Process

a. Urban Land Institute (ULI)

The Urban Land Institute is a 501(c)(3) nonprofit research and education organization supported by its members. Founded in 1936, the institute now has nearly 30,000 members worldwide representing the entire spectrum of land use and real estate development disciplines, working in private enterprise and public service, including developers, architects, planners, lawyers, bankers, economic development professionals, among others.

As the preeminent, multidisciplinary real estate forum, ULI facilitates the open exchange of ideas, information and experience among local, national and international industry leaders and policy makers dedicated to creating better places. The mission of the Urban Land Institute is to provide leadership in the responsible use of land and to help sustain and create thriving communities. The Boston District Council serves the six New England states and has over 1,000 members.

b. Technical Assistance Panels (TAPs)

The ULI Boston Real Estate Advisory Committee convenes Technical Assistance Panels (TAPs) at the request of public officials and local stakeholders of communities and nonprofit organizations facing complex land use challenges who benefit from planning and development professionals providing pro bono recommendations. At the TAP, a group of diverse professionals specially assembled with expertise in the issues posed typically spends one to two days visiting and analyzing existing conditions, identifying specific planning and development issues, and formulating realistic and actionable recommendations to move initiatives forward in a way consistent with the applicant's goals and objectives.

c. Panelists and the TAP Process

Panel Members

ULI Boston convened a panel of volunteers whose members represent a range of the disciplines required to address a range of challenges posed by complicated, large scale, and infrastructure intensive commerical employment centers designed to accommodate high traffic volume.

Disciplines represented included planning, architecture, landscape architecture, civil and environmental engineering, development, transportation planning, environmental planning, and public health. Members were selected with the intent of convening a robust array of professional expertise relevant to the MAPC's objectives for this TAP. Following is the list of panelists:

- Ed O'Rourke, Business Development Leader, GEI Consultants (TAP Co-Chair)
- Fred Kramer, President, ADD Inc (TAP Co-Chair)
- Mariana Arcaya, Manager, Public Health Division, MAPC
- David Hancock, Principal, CBT/Childs Bertman Tseckares, Inc
- Rich Hollworth, Director of Engineering, Land Development Group, VHB
- Cathy Offenberg, Principal, Carol R. Johnson Associates, Inc.
- Keri Pyke, Principal and Director of Transportation Planning, Howards/Stein-Hudson Associates
- Sean Reardon, Sr. Vice President, Tetra Tech

Caitlin Bowler, planner, served as a consulting technical writer, while Stephanie Wasser, Executive Director, Michelle Landers, Manager,

and Sarah Krauthiem, Associate of ULI Boston provided organizational and technical support in preparation for and during the TAP event.

Stakeholders

The TAP benefited from the participation of the diverse group of stakeholders—property owners, local residents, business people, and nonprofit board members—who met with the panel and shared information, ideas, and opinions on a range of issues effecting the Framingham Technology Park and 9/90 Corporate Center Area. The following individuals served on stakeholder panels:

- Christopher Belton, Marriott Residence Inn
- Stanton Bigelow, Framingham Public Works
- Michelle Brooks, Staples
- Tammy Calise, Consultant on Community Transformation Grant
- Ed Carr, MetroWest Regional Collaborative
- Laurie Courtney, Framingham Health Department
- Eric Denoncourt, Town of Southborough
- Jay Grande, Framingham Planning Board
- Stephanie Hirshon, MetroWest/495 Transportation Management Association
- Bruce Leish, MetroWest Regional Collaborative
- Tom McKenney, Sheraton Framingham Hotel and Conference Center
- Gordon Brailsford, Genzyme
- Alison Steinfeld, City of Framingham Director of Economic Dev.
- John Strickland, Bose
- Jessica Strunkin, 495/MetroWest Partnership
- David Yancey, National Development, 9/90 Park Property Manager

TAP Process

The Framingham TAP was held over two days on May 30th and June 12th, 2012, at the Framingham Sheraton and Conference Center. In the morning, the panel toured both the Framingham Technology Park and the 9/90 Corporate Center via bus, with additional stops at the Foss Reservoir and the Route 9 Park and Ride.

After the tour, the ULI panel interviewed a diverse series of stakeholders to gain a better understanding of relevant issues, dynamics, challenges and opportunities in Framingham. The panelists then engaged in an intensive charrette to develop concepts, strategies and recommendations for action and further study. The PowerPoint presentation is available electronically at the ULI Boston website http://boston.uli.org.

2 | Background & Assignment

a. Framingham's Regional Location

Located midway between Boston and Worcester at the crossroads of I-90, Route 9, and Route 30, Framingham's two commercial and industrial parks allow companies to take advantage of the region's assets. Key assets include:

- An educated workforce produced at a number of academic institutions in Boston and Worcester, including Worcester Polytechnic Institute, and U-Mass Medical Center,
- A range of housing types at various price points. There is a mix of housing opportunities in the immediate cluster of towns that surround Framingham, and the relative proximity of I-495 opens up another band of towns as viable options (as illustrated by employee zip code data)

Three major corporations— Bose, Staples, and Genzyme—all have corporate headquarters and/or research and development centers located in Framingham's commercial/industrial parks—the Framingham Technology Park and the 9/90 Corporate Center. Employment figures for the major employers in teh parks is shown below.

Company	*Employees*
Staples	3,215
Genzyme Corp.	2,375
Bose Corp.	1,536
CA Technologies	625
Cumberland Farms Inc.	400
MetroWest Daily News	325
Nestle Waters North America	200
Sheraton Framingham Hotel	160
Total	**8,836**

b. The Technology Parks

Framingham Technology Park (FTP)

The Framingham Tech Park is a commercial and industrial park located just north of the I-90/Route 9 interchange, with direct access via California Avenue (off Route 9) and New York Avenue. New York Avenue is accessed from Route 30. The Pleasant Street Connector links Route 30 to Route 9. There is no direct access to the park from I-90, although plans for such a scheme have been discussed in the past.

FTP's largest tenants include Genzyme (Science Center) and Bose (Corporate Center and R&D Center), each of which utilize multiple buildings that are fully occupied. Smaller tenants in the park include MetroWest Daily News, Penske Truck Rental, FedEx World Service Center, Nestle Wafers North America, and the Mountain Childcare Center.

The large International Paper Company complex at FTP has been empty for years, but is now part of the Crossroads Corporate Center (C^3) project. This is a pre-permitted project that would include 350,000 sf of research and development space with an accompanying 1,250 parking spaces if constructed. Another empty building sits at 100 Pennsylvania Avenue, which though empty for years, is well maintained.

Shuttle Service. Shuttles operate within the park to transport people between buildings. Other shuttles operate three routes to locations outside the park in Marlborough, Southborough, and Framingham. The shuttle makes 30 runs per day.

Bose operates its own shuttle buses that run ever day from 7:30am to 5:30pm—linking the Mountain to parking at the foot of the hill in a seven minute ride.

Communication. The communication between Genzyme, Bose and the Town of Framingham is good, in part because the Tech Park's roads and infrastructure are Town-owned, so channels for ongoing communication exist for ease of operations. There is an informal committee (Bose, Genzyme, Town of Southborough, Congress Group, Town of Framingham, Child Care Center) that meets twice annually, and the Congress Group.

The 9/90 Corporate Center (9/90 Center)

The 9/90 Corporate Center is an 82 acre commercial park privately owned and operated by National Development. The park is organized around an old municipal landfill, now capped, on which one of several large surface parking lots exist. Building are placed along the edges of the lot.

At 490,000 SF, Staples is the 9/90 park's largest tenant. Other tenants include Computer Associates and the Marriot Residence Inn. Each single-tenant building has its own amenities, which include a cafeteria, gym, and showers.

The 9/90 Center has walking trails that are well maintained, but not suitable for walking in business attire. A small group—generally 30 people—walk on the trails at lunch time, but this is a very small fraction of the workers on site daily at the park.

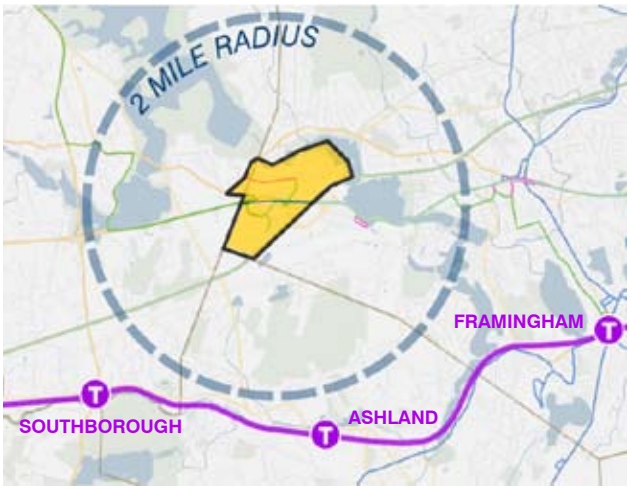
The open space at the old landfill is well maintained and used for company picnics. Fifteen years ago there was a plan to build an amphitheater, but the project was never completed.

c. Public Transit

Three different MBTA commuter rail stations—Framingham, Ashland, Southborough (from east to west)—are located within __ miles of the two technology parks, just to the south. These stations, which could take hundreds of vehicles off the roads if they could be efficiently and easily utilized by tech park employees, are close, but simply not close enough. Without reliable and efficient connections between the stations and the tech parks, the commuter rail cannot be a viable commuter alternative.

In addition, infrastructure improvements now under construction make Framingham in general difficult to navigate. So while the commuter rail station in Framingham Center is geographically close to the tech parks, it still takes a long time to get to the technology parks from there.

Some Corporate shuttles do go to the Framingham Center Station, but these are usually sporadic and often just for Genzyme to get staff to Cambridge.



d. MAPC's Objectives for the TAP

The MAPCs objectives for the TAP focused on the transportation infrastructure issues, land use issues, and questions concerning competitive advantage of Framingham's technology parks over others in the region. Specific objectives were:

1. **Economic Development**

   How can we enable more economic development while reducing per employee vehicle miles traveled in this location?

2. **Land Use Recommendations**

   What land use recommendations are there regarding the Framingham Tech Park, the 9/90 Corporate Center, and the land along Route 9?

   What are the specific locations where these recommendations would be appropriate?

   Which of these recommendations are short-term and which are long-term?

3. **Issues at Other Parks**

   What are the current issues that other office and industrial parks are encountering?

   What recommendations and updates have been made to retrofit these areas?

4. **Competitive Advantage**

   What makes this site similar or unique compared to other office and industrial parks?

Panelists on the site tour, congregate near the top of "Bose Mountain."

Panelists discuss issues at the charrette on June 12th.

3 | Observations & Findings

a. Possible Expansions

9/90 Corporate Center

The 9/90 Corporate Center is nearly built out, with only 250,000 sf left to be constructed; Staples would be the one to occupy it. Last year, Staples completed construction on a second parking facility, but its overall trend has been to hire additional employees without any physical expansion. Even with flex time, this has created a greater need for parking.

Although last year it was hardly an issue, most winters snow creates pressure on the 9/90 Center's already strained parking supply. Piles of plowed snow take up precious real estate within each lot.

Additional parking structures would have to be constructed should expansion occur.

Framingham Technology Park (FTP)

As the owners of 14 buildings that house a total of 1.2 million sf of office, laboratory, and manufacturing space, with the potential full capacity of 2 million sf, Genzyme is the company most likely to expand in the FTP. The proposed 900,000 sf expansion, for which the company filed a Draft Environmental Impact report with the State, would include demolition of older buildings for replacement with new, built-to-spec structures. (The plans are on hold as the company reassesses needs based on the Sanofi takeover.)

Genzyme is a 24 hour, seven days a week operation, with 25% of its shift workers on campus at any time. Needless to say, expansion of this size would have major impacts on traffic and implications for the overall functioning of the FTP.

b. Traffic & Route 9 Intersection

Traffic. Congestion and traffic flow are concerns, both locally for both the Framingham Technology Park and the 9/90 Corporate Center, and regionally as well, especially at peak rush hour times. Because neither park can be accessed from I-90, all traffic flowing from I-90 or Route 90 into either park must either pass by or into California Avenue. Likewise, at the end of the day all traffic must either exit out of California Avenue or pass by it, funnelling onto Route 9.

Traffic spikes again at lunch time, as employees head to Route 9 either to get lunch or run errands, but this congestion does not equal that of rush hour.

Some tenants stagger release times (i.e. Staples leave times are staggered between 4 and 5:30), but the overall effect of this practice does not effect equal the scale of the overall problem.

Route 9 Intersection at California Avenue. Route 9 is a choke point and with inadequate signage for businesses for which access via California Ave. is required but neither intuitive nor visually clear. Heading westbound, drivers who miss California Ave. often use the Hess Station to do a u-turn, in order to head back east. Framingham's signage bylaw does not allow off site signage, which is the root of this problem.

c. Getting to Work

Driving

Driving alone is by far the most prevalent means by which employees coummute to either tech park, for two significant reasons.

(1) Public transportation is not an attractive option because of its limited accessibility, limited flexibility, and the length of time of the overall commute. Recent fare increases make the option even less attractive.

(2) A car allows an employee to run an errand or go out for food during the lunch hour. Aside from corporate cafeterias, there are no lunch counters or food vendor within walking distance at either park and no other services (e.g. dry cleaner, hair dresser, bank).

Car/Van Pooling

The MetroWest/495 Transportation Management Association (TMA) has been instrumental at helping businesses in the MetroWest area, including several in Framingham's tech parks, initiate and sustain successful carpools (3-4 people) and vanpools (9-15 people). The organization maintains a database that allows individuals of member companies to find people with whom to carpool. (Some, but not all companies in the tech parks are members.) Remarkably, the program guarantees members a ride home, and if in the case an emergency a member is unable to take the rail home, the organization will get them a ride home for free.

Bose, Genzyme, Staples, Computer Associates, and National Development are all members. Of these corporations, Staples has the most vibrant carpool culture—although in recent years higher gas prices have resulted in more carpooling across companies.

Certain factors are associated with higher levels of carpooling within a particular company. There is a correlation between the rigidity of employees' scheduled hours and carpooling. A company that features more traditional hours (i.e. 8:30am to 5:30pm) provides more fertile ground from which carpools can develop. Finally, younger employees are more amenable to carpooling and likelier to develop carpooling habits.

Public Transit

Commuter Rail. As mentioned in Chapter 2, the commuter rail stops closest to the tech parks are not well enough connected to the parks—in terms of schedule, flexibility, and shuttle service—to make regular commuting attractive and/or feasible to much of the employee population.

Bus service. MetroWest Regional Transit Authority operates a well developed bus system that connects the Framingham MBTA station with the Park&Ride opposite California Avenue and Staples, but these connections are infrequent and inadequate to meet the needs of many employees at these parks.

Bus schedules impact hotel employees at the Sheraton Hotel, especially the housekeepers. The bus drops them on the south side of Route 9, forcing them to make their own way across Route 9, which has no crosswalks or pedestrian lights at that location.

d. Getting Around In Framingham Tech Park

Walking

Framingham Technology Park is a vehicle-oriented district that is not hospitable to pedestrians—in terms of scale nor pedestrian infrastructure. There sidewalks, where they exist, are hardly buffered from the street and only somewhat shaded by street trees. Places to which a pedestrian would walk (e.g. cafes, coffee shops) do not exist. The sheer amount of paved area across the two parks—and their scale—deters visitors from walking.

This is problematic at different intensities. For those employees who would like to walk to a cafe to purchase lunch on occasion, that option simply does not exit. Some lower skilled employees rely on public transit (bus) to get to the Framingham Technology Park, which drops them off at the Park 'n Ride opposite California Avenue on the southern side of Route 9. There is no safe way for such employees to access the technology park and the specific building in which they work.

Biking

There are a handful of dedicated bicyclists (approximately 25) who ride to work at the Framingham Tech Park when the weather is amenable, but otherwise bike ridership is highly limited. Route 9 is not hospitable to bikers, and the park lacks the retail and dining destinations that might accommodate within-park bicycle travel. Further, it is a common perception that shuttles between buildings within the park are more likely to be utilized than would bike share programs, though bike sharing has never been attempted within the park and there is little empirical data available to help predict how successful a within-park bike sharing system might be.

Realistically, shuttles between buildings within the park are more likely to be utilized (and therefore effective) than bike share programs.

In Framingham Tech Park, a view west down New York Avenue from its intersection with California Avenue. The intersection is not hospitable to pedestrians.

4 | Recommendations

The recommendations address two major concerns for the Framingham Tech Park Study Area:

(1) Access to/from the Tech Park Areas

(2) Life within the Tech Park Areas

PART I: ACCESS TO THE TECH PARK AREA

A. Enabling Economic Development through Improved Transportation Options

There are a series of discrete strategies and actions that could, together or separately, enable more economic development in the Tech Park area while reducing per employee vehicle miles traveled overall.

As it considered the possible strategies and actions, the panel identified target numbers for implementation based on the feasibility of meeting that target, and then calculated the amount of future development the successful implementation of that strategy would allow.

1. Increase Carpooling/Ride Share

Eliminate Trips. Staples has a strong and successful rideshare program, supported by upper management, in which 10% of the workforce at the corporate headquarters participate. In 2008, in parallel to the rise in gas prices, rideshare participation rose to 14%, showing that increased rideshare levels are possible. This level of consistent participation would allow for 100,000 sf of new development without increasing traffic.

Target: 13% Ride share

Proof: Staples achieved 14% in 2008

Result: Would support 100,000 square feet of new development without increasing traffic

Actions: Study Regional Park and Ride Options
Focus on combined study area initiative

2. Improve Public Transit Connections

Reduce Trips. Public transportation to the tech parks is underutilized for clearly identified reasons: limited access, limited flexibility, and duration of trip. These barriers to use are not insurmountable, but would require a high level of coordination and commitments to increased service. TMA reports that 15% of the tech park workforce that does not already depend on public transportation would be interested were the existing hurdles removed. Given that self reported interest, a 7% level of ridership could be within reach.

Target: 7% Ridership

Proof: 15% of total employee population is interested

Result: Would support 150,000 square feet of new development without increasing traffic

Actions: Study benefits associated with each transit improvement (Expanded service, greater convenience, better connections, more frequent service, etc.)

3. Create Direct Connection from Park to Turnpike

Improve Capacity of Existing System. This large infrastructural investment would dramatically improve circulation in the area, relieve congestion, and allow 1,000 additional trips that would support 1,000,000+ sf of new development—more than proposed by Genzyme.

This action would reduce the amount of time drivers spend on the road navigating from I-90 onto Route 9 and it would reduce the level of left turn traffic from Route 9 onto California Avenue. Ease of access could also make Framingham Technology Park a more attractive location for other kinds of development, such as mixed use, in the long run.

Target: 1,0000 Additional Trips

Proof: Turnpike Ramps are constrained by Route 9

Result: Would support 1,000,000+ square feet of new development without increasing traffic

Actions: Study direct connection from turnpike toll plaza to Pennsylvania Avenue

Study improved intersection at New York, Pennsylvania and California Avenues

B. Explore Rezoning toward Mixed Use, High Density, Residential Development

Looking longterm, it is not inconceivable that a high density, mixed use, residential development could succeed at the Framingham Tech Park. This would be especially true if Genzyme's expansion plans proceed and a pool of educated, well paid, younger employees interested in convenience and amenity is created.

For employees who then chose to move to the development, overall vehicle miles traveled to work at this site would be reduced.

A caveat is that such a development would have to be very high quality and dense, walkable, and amenitized.

Target: 13% Ride share

Result: Residential opportunity tied to the study area directly eliminates VMT

Actions: Create Market Feasibility study for Mixed Use Site nearby

Study similar cases in region (example: Burlington's Northwest Park)

C. Regional Industrial Park Comparisons

Below are a series of comparisons to other corporations, industrial/commercial park developments, and trends with relevance to activity and policy in the Study Area.

Google. Google provides a highly amenitized and convenient shuttle service to its campuses, allowing employees to ditch their cars, and get a ride to work in a wifi outfitted bus, allowing them to email or surf the web on the way to the office. The *New York Times* reports that 14% of Google employees would quit if they had no shuttle service[1]—it is that highly valued a service.

Genetec. This corporation, based in California, conducted an internal cost/benefit analysis that showed it was less expensive to pay people to carpool than to build parking.[2]

Shuttle Stops. The *Wall Street Journal* reports 20% higher real estate values near shuttle stops.[3]

Seaport Square Boston. At this new development, onsite workforce housing means dramatically fewer commuter trips, and the residential presence will add 24 hour life to the area. Again, the caveat is that the designs for buildings and urban fabric must be very high quality so that it is a nice place to live.[4]

Northwest Park. This Burlington, MA commercial park provides two separate access routes to the regional highway network, which reduces congestion.

---

[1] Helft, Miguel. (2007, March 10). Google's buses help its workers beat the rush. *The New York Times*. Retrieved from http://www.nytimes.com/2007/03/10/technology/10google.html.

[2] C. Girrbach. (2009, December 8). Parking lot funds Genentech bus. [Web log]. Retrieved from http://greenbiztips-content1.blogspot.com/2009/12/parking-lot-funds-genentech-bus.html

[3] Keates, N., & Fowler, G. (2012, March 16). The hot spot for the rising tech generation. The Wall Street Journal. Retrieved from http://online.wsj.com/article/SB10001424052970204781804577277

[4] Rourke, J., Hynes, J., Segal, R., & Pyke, K. (2010, January 6). Seaport Square in South Boston. Retrieved from http://seaportsquare.com/PDFS/SeaportSquareCommunityMeeting01.06.pdf

PART 2: LIFE WITHIN THE TECH PARK AREA

Conceptions of what certain kinds of places can be—commercial and industrial parks for one—have been evolving over the past fifteen or so years, as demand for walkable places has grown, driven by lifestyle preferences and streams of data from the health community imploring Americans to get outside and walk.

This section suggests a series of physical transformations, at a range of scales, that would contribute to a more pedestrian friendly and walkable environment.

Retrofitting Suburbia

"Incremental Metropolitanism" consists of connecting and filling in to increase the density of people and uses in the same acreage, making better use of infrastructure and energy and creating environments congenial to walking and socializing, all of which aggregates demand sufficiently to support convenience retail and restaurants.

From: "Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs."

By Ellen Dunham-Jones and June Williamson

A view of Genzyme's facilities from Bose Mountain in the Framingham Tech Park.

A. Animate Main Street

Pedestrian Spine

Denoted by the yellow line in *Figure 2*, the spine along New York and Pennsylvania Avenues is highlighted to emphasize the opportunity for infill. Density created by infill would transform the road from a driveway into a traditional "Main Street," creating the opportunity to reengineer it to encourage pedestrian activity.

Originally designed to support a different typology of use, the street is excessively wide. Narrowing it to integrate sidewalks would be a first step toward creating a pedestrian spine. Adding a layer of rich streetscape elements would complete the process.

Streetscape Improvements

Streetscape elements listed below would support a more pedestrian friendly environment with the potential to keep even more people on campus during the lunch hour.

- Sidewalks where there are none e.g. Mountain Road
- Crossing Boulevard connected to Intermodal Site
- Pedestrian scale street lighting
- Accessible crosswalks
- Street trees
- Benches
- Traffic calming i.e roadway narrowing
- Shuttle Bus Stops integrated with Streetscape improvements

Figure 2: Concept Plan

Legend

- "Main Street" pedestrian spine / activity corridor
- Gateway / activity node (Major)
- Recreation trails / exercise loops
- Activity nodes / gathering spaces (Minor)

B. Placemaking

As the Framinham Tech Park shifts to a denser, more pedestrian oriented work place, there is a need to strengthen the overall park identity and to introduce an urban design framework, which provides new park-wide amenities and promotes a "sense of place," which all park employees would share. Strategies for strenthening the "sense of place" include:

- Improving site design and new programming/ land use at gateway entrances,
- Introducing a hierarchy of strategically located (major and minor) activity nodes, and
- Instituting park-wide, site design guidelines.

Implementing this framework could begin with symbolic gestures of improving the gateway identity at the park's primary entrance on Route 9 and at the secondary entrance to the west at Route 30 and New York Avenue. In subsequent phases, these gateway locations could be enhanced to include retail and transportation infrastructure. Within the park interior, infill development should be consolidated around dedicated activity nodes, which are convenient to parking, intra-park shuttle transportation and short distances between live/work/play destinations.

Key Nodes—Imagery & Development

Four key nodes are identified in the Concept Plan (*Figure 2*):

Node A. Intermodal Gateway. Located at the primary entrance to the Framingham Tech Park, this location would benefit from a symbolic, gateway gesture. It is also a logical and visible stop for a small transit center. Any improvements in this area will need to be sensitive to its critical transportation function. Ideally, the gateway would integrate urban design with transportation infrastructure, addressing multiple park need (i.e. a roundabout at New York Avenue and California Avenue).

Node B. Mixed Use Gateway. Located at the secondary, western entrance to the Framingham Tech Park, this location is a reasonable place for a small commercial/retail center that could house food and personal services establishments, designed to reduce the need to leave the park during business hours.

Node C. Mixed Use, High Density, Residential Development. Located at the heart of the tech park, this location is the most logical place for any higher density development on the site.

Node D. Recreation Gateway. At the far eastern edge of the tech park, overlooking Foss Reservoir, this location would be ideal for a small park/recreation center. This park would also serve as the trailhead for the proposed network of walking trails.

Increased Internal Connections:

Introduce Gathering Spaces. The panel identified opportunities for pocket parks and overlooks that would enhance the sense of community in the outdoor environment as additional infill development occurred. These small points of destination need not be large or intensively designed, just shaded enough to offer an inviting place to sit for a quiet moment or conversation.

This small pocket park at Tulane University is incredibly simple: benches, pavers and ground cover, and a vegetated trellis to provide some shade.

Incremental Connection. As new development is considered, buildings need to be thought of from the inside out—creating pedestrian connections and improving the walking experience and quality of spaces between buildings.

From building to building connections, move further out, to recreational connections. Over time a pedestrian network should emerge to meet the range of needs.

Outdoor sitting nooks at The Riverside Center (Newton, MA) enrich connections between buildings. Photo courtesy of CRJA.

Long Term Connections. There are several opportunities for creating connections and recreational options that could be pursued over the long term. These include:

- Rail Spur as Greenway
- Bay Circuit Trail Connections
- DCR Trail (Improvements)

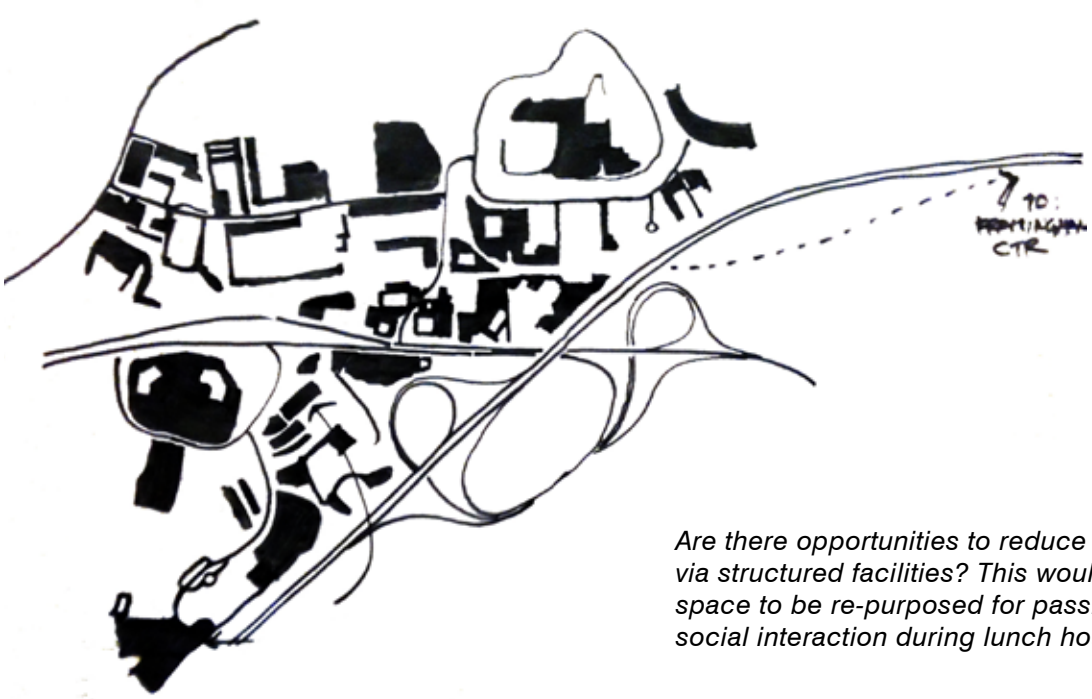
Multi-use trail at Solomon Pond Park (Marlborough, MA). Photo courtesy of CRJA.

Park design guidelines for open space

Instituting design guidelines for open space and streetscapes should be considered to support a cohesive, park-wide identity and enhanced sense of place.

The master plan for TeleCom City in Malden and Everett, Massachusetts, envisioned buildings oriented to the Mystic River, with pathways in a park setting for the enjoyment of office workers and the surrounding neighbors alike. Plan courtesy of CRJA.

Figure 3: Figureground Illustrating Extent of Paved Surfaces in the Tech Park Study Area



Are there opportunities to reduce surface parking via structured facilities? This would allow outdoor space to be re-purposed for passive recreation/ social interaction during lunch hours and breaks.

Are there ways to integrate streetscape elements into the existing office park environment to make it more safe and inviting for pedestrians?

Intersection at New York and California Avenues.

Common open space at Mystic Center (Medford, MA). Photo courtesy of CRJA.

5 | Next Steps

PART 1: ACCESS TO THE TECH PARK AREA

- Study Regional Park and Ride Options
- Focus on combined study area initiative
- Study benefits associated with each transit improvement. (Expanded service, greater convenience, better connections, more frequent service, etc.)
- Study direct connection from turnpike toll plaza to Pennsylvania Avenue
- Study improved intersection at New York, Pennsylvania and California Avenues
- Create Market Feasibility study for Mixed Use Site nearby
- Study similar cases in region (example: Burlington Northwest Park)

PART 2: LIFE WITHIN THE TECH PARK AREA

- Reconsititute the Tech Park Association
- Conduct a Market Feasibility Study
- Develop Streetscape & Open Space Design Guidelines
- Ongoing Streetscape Improvement Implementation
- Engage DCR/Reservoir Trails
- Redirect Transportation Mitigation Fee

Gateway signage is integrated into a stone wall that demarcates a small park at Riverside Center (Newton, MA). Photo courtesy of CRJA.

A simple, landscaped patio transforms an exterior alcove into a lunching/gathering spot at Cabot Place in Waltham, MA. Photo courtesy of CRJA.