COMMITTEE ON INFRASTRUCTURE

APRIL 27, 2016

A meeting of the Committee on Infrastructure was held Wednesday, April 27, 2016, at 7:00 p.m. in the Aldermanic Chamber.

Alderman-at-Large Mark S. Cookson, Chair, presided.

Members of Committee on Infrastructure present:	Alderman David Schoneman, Vice Chair Alderman Sean M. McGuinness Alderman Richard A. Dowd (Arrived at 7:06 p.m.) Alderman Tom Lopez (Arrived at 7:09 p.m.)
Members of PEDC in Attendance:	Alderman-at-Large Brian S. McCarthy Alderman Tom Lopez

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PUBLIC COMMENT

Mr. Jim Cutter, 86 Palm Street

Mr. Cutter read aloud a letter and submitted a diagram into the record which is attached to these minutes.

PRESENTATION

Downtown Specialist Progress Update

Mr. James Vayo, Downtown Specialist, Economic Development Department

I've been asked to join the economic development division team to help execute improvements to downtown and help facilitate growth. I've been charged with trying to execute tenants within the Mayor's State-of-the-City address.

This started out with trying to create a framework of a vision for the future and that vision was driven by some needs that we saw and opportunities for growth. First and foremost was the housing choice in downtown. Right now the region has one of the lowest vacancy rates in the state of New Hampshire, some metrics saying as low as 2.1% and that particular figure comes from the New Hampshire Housing Finance Authority's annual rental survey from last year. Rents, as a result of there being such a low vacancy rate, rents continue to go up annually across the board; high quality or low quality, it doesn't matter, it's a factor of supply relative to demand. Downtown is poised for new market rate construction, new market rate rental units as a result of this low vacancy rate. Preferences are changing regionally and nationally. People are looking to change their lifestyles and there are opportunities to meet their changes in preferences. We have an opportunity to strengthen our access to large markets such as the Boston region and by doing so we can attract talent to come and start their businesses here. One of things that I brought today that I will leave with you is a report "What do the best entrepreneurs want in a city" and it's really good, it looked at 400 of the fastest growing companies in the U.S. and it asked the entrepreneurs of those companies what they sought out before they started their businesses and it's a very enlightening and an easy read document and lastly, a vibrant retail economy. Retail is shifting dramatically these days with the advent of technology but some retail sectors are actually doing really well and they revolve around service and authenticity in ways that you can't get from buying something from Amazon or a Zappos. There are opportunities to grow those but they require a good foundation of purchasing power and so the old adage that retail follows roof tops for bricks and mortars is very true even to this day. So how do those things jive with our shared values for our city? Well, first it's talent; our city is incredibly well-educated and that gives us a leg up in the region because educated people require a high quality life and they are an attractor for businesses. Businesses will relocate where education exists. It means less start up to them relative to training employees and such. Element two is our downtown has four really

large employment bases here; we have BAE, we have the two hospitals, the city itself is a large employer in the downtown so we have a base of employment that already exists in our downtown that can support growth of our record. Element three which may seem counter intuitive or not at first blush important but a beautiful city esthetics are tremendously important to creating attachment between people and the places where they live or work so by having a beautiful city, which we do, we have tons of architectural and cultural heritage and beautiful natural resources within our downtown; we can attract people to come and live and work in our city. Lastly is the openness to new ideas. Innovation takes place in an environment that is free of criticism and so we are very lucky that our city is relatively open to a diverse set of backgrounds and people and that makes our economy and our social system more resilient to changes. Really quick I just want to give a rundown of a couple of people that I am friends with that I think are great signifiers of where our economy is going downtown. First is Grant Morris from New Sky Productions, he runs a video marketing company here in the city. He got his start working at the Telegraph and living in Clocktower Place. He very quickly started his own business and became very successful and bought a house within walking distance from Main Street and is a major contributor to employment. He has four employees now in the very short time that he has been in business. That's an example of an entrepreneur who has a successful business model that is growing. It is unlikely that he would relocate because he has rooted himself in our community. Lydia Foley, I like Lydia's story because she is from Nashua and she decided to stay. She bought a duplex in downtown, which is the same thing I did. She rents out half of her house and lives in the other half. This is an incredibly affordable way to get past the housing crunch that we are in right now. Lydia is in the real estate industry. She is a realtor and I think she might be the first realtor to have a Main Street address where she is posting the listings in the storefront of her business. If you go to Portsmouth and other places you see these really sheik realtor's offices with very high end condos and houses in the storefronts and I think Lydia is beginning that kind of thing in our community. Medina, her and her husband have a mom and pop style shop and they live in downtown and they have a child and I see her on Sunday's walking her child down Main Street in a stroller. They run a t-shirt printing and graphic printing store and it's very impressive what they are doing with the resources they have access to. So what do people want? People want an attractive place to live and they are looking for walkable environments. This is a little different than the way we have seen development over the last decades, a lot of our development has been suburban in nature and really we are a small city in a large suburban city. It's a new thinking and a shift in demographics and preferences of those demographics. Why does this matter? Our city has two states, a suburban state which is not particularly walkable but a high value and a coveted place to live and then the downtown which is highly walkable but is only just now starting to germinate into residential development. This is important because the city as a whole might not be that walkable but look at Front Street in downtown, it gets a walk score of 91% which is a walkers paradise and the reason this matters is because there has been a correlation and it's been studied to death quite frankly that there is a linear correlation between walkability and the value of a home. So Boston in this map which falls about midway through the set there is almost a one for one. For every point more walkable a neighborhood or a house is it has a 1% increase in home price. That's a symptom of a demand for walkability. In recapping, some of the market indicators, the demographics, millennials and boomers are looking for walkable environments and they are voting with the wallet. Another indicator is peak driving, ever since the recession there has actually been a reduction in the percentage of 17 to 21 year olds who are getting their license. That percentage is continuing to decline. Third is technology, peoples Smart Phones, the way we do business in the retail sector, they have all changed and the way we deal with technology changes our decision making on a daily basis. Lastly is the housing choice, the demand is rapidly outpacing supply and new supply is not keeping up with changes and preferences. How are we going to create some new options? I'll give an example of Jack and Laura, they are fictional characters but their story is very normal for a young family in New Hampshire. So Jack and Laura have a series of annual expenses, housing, transportation, child care, food and they have very little money left over at the end of the year for recreational and leisure spending. In this scenario Jack is driving around in a very old car that he is contemplating replacing but they are also considering moving to a place where he could bike to work. Jack could not renew his car and they could become a one car household and still manage if Jack is willing to bike to work. In this scenario they would have an additional $7,300 per year to spend on discretionary or saving for a house. The ability to make a decision to become less reliant on a car has major implications for people's household incomes and their personal finances. Our market builds a product that they think we want and they can capitalize on to the

highest degree. A lot of times that market looks like this. Maybe regionally it's a little different than this but in general sub-divisions, large high value homes in Nashua might cost $300,000 or $400,000. This is an aerial image of a portion of Nashua which is a series of sub-divisions with very similar houses laid out. There's nothing wrong with this, this actually created a tremendous amount of wealth for our community but it doesn't reflect the changing preferences going into the future. When you own a house that big you have to fill a house that big with material things that you own or wish to own or just to live a lifestyle that you choose and this may be unattainable for some people so how can we make sure that we provide options for people that maybe can't attain this. Here's another example, this is the antithesis of the large house, this is a tiny studio unit and this is something that could exist in the downtown. What happens here is that this frees people up from material possessions to enjoy and share experiences. This project is in Rockville, MD and it is right off of a commuter rail station to Washington, D.C. This particular project has a density of over 120 units and is very high end. These units go for tremendous amounts of money. They create a third place, you may have a smaller unit but you have a shared common experience. What do we have that looks like that in New Hampshire? Just recently Portwalk Place was completed in Portsmouth, NH and is very similar in nature. It's a mixed use of retail and parking on the first floor with residential and hotel on the upper floors. This is going to be tremendously positive for Portsmouth as this area was very blighted before. It sits directly adjacent to their municipal parking garage which this project relies on. What if we want to be close to nature, we all want access to the grass lawn and the treed backyard and there are different ways you can get to that. This is actually a picture of Mine Falls Park in the heart of our downtown. We can have completely rural experiences minutes from our front door and we are fortunate to have this natural resource in the heart of our city. You can be steps from the Tree Streets and cross over the canal and be in this environment. When we build out our downtown we take pressure off of development of undeveloped spaces. Over the years we've seen a lot of debate about developing areas within the Pennichuck Water Shed. We can really protect those areas and ease housing burdens by focusing on development in our downtown and it protects the spaces that we want to remain green. To give a couple of examples about what is going on, Clocktower Place brought 500 people within walking distance to Main Street and probably floated the retail on Main Street for its resurgence from a real low. Last year the Cotton Mill Apartments came on line and that's 101 apartments and that's probably 150 to 200 people with incomes who are spending their money close to where they live. Franklin Mill could come on line in the near future and that would add another 168 units of people who are willing to spend their money within walking distance from there they live. That's kind of a pre-cursor to the real opportunities that exist in our downtown.

I'd like to now take you through a series of sites that provide a larger opportunity for development. When we saw the Portwalk Place it was to understand on how to capitalize on some important assets that we have. We have large municipal parking structures in our city and we utilize them during the day but not at night. At night if we were to create a more effective overnight parking program that could take the burden of creating parking off of developers and better utilize existing parking structures. This is not an easy thing to do and would require a lot of coordination but if it's done successfully it can create a tremendous amount of wealth for the municipality who collects fees on our parking structures. This is a potential growth area for our city. The second element is what type of construction can go in very high value land in our downtown. This is something called podium construction. What happens is the first floor which is G1 and M stands for Mezzanine and that can't be more than 1/3 of the total floor plan of the first floor; that would be retail or parking and it would be built out of concrete with a concrete deck over the Mezzanine and then everything about that can be built wood free in construction and that would lower the total cost per square foot for development and it may make sites that are undevelopable right now developable because they need capital costs that are low enough to get the financing to build it out. So our downtown, this is Main Street running right through the middle and within a 15 minute walk from say Clocktower all the way to Spruce Street, within that area we have significant opportunity for development. Railroad Square, Franklin Street, Library lot that's really Pearson Avenue, the Church Street lot, Water Street, the Court House and Main Street. I've talked with stakeholders in these areas. Franklin Street; everybody is very familiar with this large mill building and the opportunity for development there but there is also an opportunity to develop this large surface parking lot while maintaining the parking on the first floor. Railroad Square is a little bit of a different animal because it's a little more compact but there are significant opportunities to create development if parking can be managed properly. Again, this very

contingent on creating a shared parking solution. The Pearson Avenue lot, I like this one a lot because there is this treed lawn area here which is basically unused and that could potentially become, because of the grade changes, a three-level parking structure and if that could happen we could actually free up this lot for development and if that happens then RJ Finlay has already said to be interested in looking at the development of this and it's a tremendous sized site so it could be a huge opportunity. Water Street, everyone is familiar with the Mechanic Street lot. That could be development in a way to create a two-tiered parking deck to accommodate the existing parking, create new parking and create an opportunity for new programming. Furthermore, the Water Street Bridge at some point will reach the end of its life and the city will have a choice between putting in major renovations, replacing the bridge or looking at opportunities to do new development. We could eliminate the bridge and create an (inaudible) that would allow for two new developments to happen there. It's a significant tax base without the burden of paying for a whole new bridge and roadway which would be significantly expensive. This one is my favorite just because the sheer scale of it, this is the Courthouse Oval, the roadway design takes up a tremendous amount of land area that could be privatized and turned into potential city blocks and so the quick math on this is about 180,000 square feet of developable space. Again, this would rely on creating a shared parking scenario or tucking parking under buildings. Mulberry Street has a couple of select sites where we talked to each of the owners about opportunities for development on each of those sites and we are continuing those discussions. Lastly is Spruce Street, there has been some significant interest from the owner about developing the northern trunk of this 6+ acre lot, it's 1.8 acres and we think it can fit close to 100 units on the site. It seems unfathomable but if think back to the Portwalk Place scenario you can hit that number pretty quickly. The next steps are to leverage our tools; we have R&D tax credits, the Brownfields revolving loan funds which allow us to help eager developers to clean up their sites. We have tax increment financing which can create mechanisms for community improvements that might get buy-ins from local residents and the downtown tax relief district which is probably the most powerful tool as it allows our city to abate property tax increases over a period of between 5 and 13 years for certain projects.

In conclusion, we think that buy increasing housing supply we will be able to create concepts for development which may realize the full potential of their land instead of letting the land just sit there because it's too expensive to sell and too expensive to build. We will be able to build new products that match user preferences and respond to market changes. We will be able to attract talented people to come start businesses in our downtown because they are looking for a downtown experience. I think we can steal people away from Boston through this. Lastly are all of these new residents and entrepreneurs and business, will they create purchasing power to float and grow our retail sector on Main Street?

Chairman Cookson

Thank you, Mr. Vayo. Are there any questions from members of the committee?

Alderman Schoneman

I'm looking at the housing in particular and I like the idea of the ground floor and the Mezzanine and then stick built above. We clearly have a lot space and you've identified a lot of lots where something like this could be built. We also have existing housing in this city. We've got housing on French Hill and in the Tree Streets that is not real upscale and in some cases not really well maintained. I'm wondering how we are going to develop something new like this while the other areas stay the way they are? How do you see these buildings pulling the other areas up or should the other areas be developed first to create the environment that can support something like this?

Mr. Vayo

That's a great question. As you are aware, you used to live in Somerville, MA and Somerville has gone through a tremendous resurgence but it didn't do it in a vacuum. That happened as a result of broader changes and preferences and the realization over time of infrastructure that created better access to Boston. Things like the extension of the green line, bike pedestrian connections to downtown created an environment

where people could choose to invest in that neighborhood and realize the potential of those older houses. I would say for our city that a transitional period would be needed where a couple of these projects would come on line and then you would start seeing very quickly smaller time local developers coming in and buying up properties as they became available for sale or existing property owners reinvesting in their property. I think it's really important that those neighborhoods have a good, healthy mix of quality type of housing to ensure that those neighborhoods can maintain their diversity both in demographic and in class. We wouldn't want to create a condition where an entire neighborhood is replaced over time; you want to make sure that the neighborhoods can maintain their income diversity over time.

Alderman Schoneman

The drivers that would make a building like this one possible are the same drivers that would improve the Tree Streets and French Hill, is that what you are saying?

Mr. Vayo

Yes, although I would say that something like this, my hope is something like this might be precursor to the neighborhoods improving.

Alderman Schoneman

I like the Franklin Street mill possibility and I think what it's going to be for itself is great but I think that will make the area surrounding; some of those houses are in great shape and some of the house are not and it might make that whole area a little bit more attractive for someone else to move in and say I want to live near that building even though they might not be in that building. I can see where they would both support each other but I think we need a cohesive strategy and I think you have that to bring the existing areas up as well as to develop something new.

Alderman McCarthy

In that same vein, it seems to me that when you develop an area, projects are viable because you can buy them low and sell high. In an area that's not well developed yet you can't sell as high as you can later on so in order to be profitable you have to buy lower so the empty and under-utilized sites are going to be the first thing that can be economically revitalized. Once that happens and the value of developed real estate in that area goes up it's then possible to bring up the purchase price so that it overlaps things that are occupied where there is value you have to buy out in order to redevelop them and it just seems like you would always see that the first thing to go is going to be the empty sites and sites that are cheap because of what's on them and then as you go along there will be the redevelopment of sites that are currently perhaps not as valuable or as good as they could be but are still of an economic value at the start of that process.

Alderman Dowd

Have you looked at the city master plan to see if these things would fit into the plan or maybe even modifying the plan? Also, have you looked at the zoning ordinances to see whether something has to be overcome relative to zoning for these things to happen?

Mr. Vayo

A lot of these sites, although I didn't verify all of them, sit within either the DMU 1 District which has an incredible amount of leeway for allowing this kind of development and the other is the Mixed Use Overlays Zone so Spruce Street sits within that zone and I believe Franklin Street as well. Some limiting factors are things like traffic. We have a very suburban city so a lot of how our policy reflects and expectation that will generate a tremendous amount of vehicular traffic when in reality these developments may develop 50% of

60% of the expected vehicular traffic. The result of that is there is a requirement to make infrastructure improvements as part of these developments and that can be a major hindrance to growth. If you plan to build something and you are required to make a half of million to a million in street improvements you may find that while the land value is low, the cost of providing the city with additional funds to make the street network work will make a project unfeasible.

Alderman Lopez

I appreciate your attention to mixed use housing. If you buy a lot of empty properties and start developing it and all the surrounding property values go up then the rent is probably going to go up to. So making sure that in the development phase you are accounting for people who might only need a studio apartment, a one-bedroom, a three-bedroom; different models and different living styles will help make sure that as areas are developed people have a place to go. I think one of the difficulties that we have right now downtown is the rent is high. It's very difficult to afford a place to live if you are a single mother or a family with three or four children and you need to rent rather than purchase a home. I think that might reflect some of the development that has taken place without the corresponding increase in housing. Historically there has been more housing downtown than there is now. There are spaces such as above Fody's that use to be apartments and for whatever reason it was no longer beneficial to maintain those so there is a gap between affordable housing, workforce housing and then desirable housing. It's important to make sure that as you work on development and you build the infrastructure that you also keep in mind the economic necessities and the mixed use space and make sure you have a number of options for people who will be in different situations.

Mr. Vayo

I'm really glad you brought that up and I wring my hands a lot at the idea of something that's a dirty word, gentrification. I thought a lot a about well if you create something that's really successful it really could have a dramatic impact on the downtown but the more I thought about that the truly moral and correct thing to do is to create development opportunities in our city to alleviate incredible demand. With such low vacancy rates even low quality units are going for top dollar and so the result is people that can't afford to make housing choices are still paying tremendously high rents and they are getting a low quality product as a result because noting is vacant. The whole market is kind of pushing it to a place where we need to create supply to stabilize rents or rents will continue to go annually as long as the current pattern is in place.

Alderman Schoneman

I am wondering if there are developers in line for some of these spaces and this kind of construction. Also, regarding the timing, there's been a lot of talk about gaining access to the Boston market and usually that includes a discussion about rail and if that is going to happen quickly it's quite some years out. Can any of this happen before infrastructure like that is in place? Is there a demand for this kind of retail space and housing and are there developers interested in building?

Mr. Vayo

As far as the access to Boston I do think that there is an opportunity to attract talent from Boston without commuter rail as long as we create an environment that appeals to their preferences. They have lived in a very intense, very dense urban environment; one of our nation's largest metropolitan areas and lowest density metropolitan areas by choice, whether it was to go to school or work for a company. They may reach a point in their lives where they are willing to make some comprises or want to have less autonomy within the community where they live. I think Nashua provides an incredible opportunity for people to come and participate in government and business and be an individual within a community in Nashua and that's something you can't get in the big city. They may not want to compromise so much that they relinquish say living in a one car household or living within walking distance of Main Street. By creating some more housing choices I think we can appeal to them. As far as physical projects, I've only been here for 1 ½ months. I have talked with 10 to

12 stakeholders so far and I'm regularly going out to meet with property owners about how they can best move forward to the next step. We've had traction with property owners, not all of them want to build their own product but they are more than willing to have a discussion about how they can get their property ready for a developer and that may go a long way to getting bricks and mortar going.

Alderman Schoneman

Are the Franklin Mill units going to be rentals or condos?

Mr. Vayo

They are all market rate rentals and the building itself is going to have a high level of amenities. There will be a hot tub pool, basketball court, a bar lounge, movie theater room, you name it. You can get the floor plans from the City of Nashua's Planning Department. What they are proposing is fantastic.

Alderman Schoneman

Is it a mix of studio's, one-bedroom and two-bedrooms and do you know what the rents are?

Mr. Vayo

I don't know what the rents are. I assume they will be more than Cotton Mill because there is a higher level of amenities; maybe 5% or 10% more than that. Maybe they will be very competitive and do it for the same price. The unit sizes are interesting. Whenever you are retrofitting these old large mill buildings they come with some compromises and one of them is the shape of the unit itself. You have very deep units because you have a very deep floor plate and if you were to build new construction you would never build them that deep because you end up with very little window real estate relative to the total area of the unit. It's likely to tend towards larger units like Cotton Mill and Clocktower but if we were to build new construction you can bet that on the whole they would be smaller units; studios, one-bedrooms and maybe some two-bedrooms but would all be smaller than what we have seen before.

Chairman Cookson

Mr. Vayo, with the presentation this evening there was a lot of focus on infrastructure. I don't want to forget the economic development side of the picture. We had invited the Planning and Economic Development Committee here to join us and Alderman McCarthy and Alderman Lopez are members of that committee. Alderwoman Melizzi-Golja was not available this evening and Alderman Clemons was also unavailable. I believe that Alderman Moriarty is out of town so I apologize that we didn't have a full representation from that committee but with that being said I did have a couple of questions. During your presentation you gave notice to us that there were four major employers within the downtown area. You identified the city as one, the two hospitals and BAE as the fourth business. While I agree with you my question is each one of these businesses are running, they have got to be profitable and therefore they have a threshold of capability and capacity that they can hold. What additional opportunities, with the exception of normal turnover within those companies, are you seeing real opportunities with those four businesses that you identified?

Mr. Vayo

I guess I would give a quick corollary story and that's when the city built the high schools we built really high quality top notch facilities and I think that those high schools, as a factor of being wonderful facilities attracts wonderful talent to work in our schools. I think if we had old, rundown schools we might not get the best talent even if we paid them the same amount of money. I think what we are seeing now is really low unemployment rates and what I am hearing from some of these large employers is that yes, they are starting to run into scenarios where talent is making a decision between working in a place like Southern New Hampshire Medical

Center and a facility in Longwood in Boston. Sometimes those decisions are being made because Nashua is not providing the lifestyle choices that those new hires are looking for and so in the end it may be more expensive for them to live in a big city and pay more of their income to housing for the opportunity to work in the big city and part of making that decision reflects on the fact that we are not providing a life style choice that they are looking for. My emphasis on housing really has to do with the fact that housing is the fundamental basis for creating a strong environment in our downtown to attract talent to be part of our community. I think the last time we met I gave a presentation to the Planning and Economic Development Committee before I was working with the city and I showed a short video about resident attachment and it was talent, openness to new ideas and esthetics. The more high quality and beautiful we make our downtown the better adept we are going to be at attracting really talented people to come work at our large employment offices and they will be more successful as a factor of that and attracting entrepreneurs to come set up and be here. Just as a quick side note, Chris Williams is here from the HUB facility that's going to be opening up soon and if they are successful in their model we may see several new entrepreneurs start businesses in our community because they attracted to being here. That has a potential of long-term positive effects for our city.

Chairman Cookson

Thank you, Mr. Vayo; we appreciate the presentation that you shared with us tonight.

Mr. Vayo

It was my pleasure, thank you very much.

COMMUNICATIONS

MOTION BY ALDERMAN MCGUINNESS TO ACCEPT AND PLACE ON FILE THE COMMUNICATION RECEIVED FROM JIM AND MARY CUTTER REGARDING 88 PALM STREET – 1950 – 1971 BUILDING PERMIT HEIRS
MOTION CARRIED

Chairman Cookson

I also have two additional communications. I am not going to accept and place on file because they have already been accepted. They were part of the February 24th meeting but I wanted to have them available for you tonight and that was an original letter from Christopher Clow, Transportation Manager, regarding the request from Velocity Performance for the metered spaces that we took action on that evening and the second one was a communication from Director Marchant, the Community Development Director, requesting from Nashua HUB to release those 15 spaces.

PETITIONS – None

UNFINISHED BUSINESS – None

NEW BUSINESS – RESOLUTIONS – None

NEW BUSINESS - ORDINANCES

O-16-007
Endorsers: Alderman David Schoneman
Alderman Tom Lopez
PROHIBITING CERTAIN TRUCKS ON CHANDLER STREET

MOTION BY ALDERMAN SCHONEMAN TO RECOMMEND FINAL PASSAGE

ON THE QUESTION

Alderman Schoneman

Chandler Street intersects with Canal Street and last term we passed some legislation to prohibit some heavy 10,000 lb. trucks except for emergency vehicles on Cross Street and even though we tried to keep traffic off of Cross Street there are still a significant number of trucks that are making their way down Canal Street from Hudson and turning right onto Chandler to cut through French Hill on their way to Concord Street and presumably the highway. These trucks sometimes get a little mixed up and end up on some of these smaller streets anyway. The issue was raised at one of the Ward meetings in Ward 3 and the resident who made the request to have trucks prohibited on Cross Street reported to us that there is still an issue. I took it up with the Streets Department to see if we could get an overall plan on what to do with trucks rather than simply saying let's put up a sign on Chandler Street and the Streets Department came back and said the best thing to do is to prohibit heavy trucks from entering Chandler from Canal Street. This is an ordinance that would put up signs at the foot of Chandler Street where it intersects Canal to prevent heavy truck traffic from even making it up off of Canal Street into the French Hill area where trucks could wind up on some of the smaller streets. There was some damage to property.

Alderman Lopez

I supported the legislation because we have some similar situations in some of the neighborhoods in Ward 4, particularly on Ledge Street. It came up in a recent Town Hall meeting that we had. We know there is an ordinance that heavy trucks shouldn't come down Ledge Street but we are not sure which section of it. I am supportive of anything where neighborhoods are treated like neighborhoods and not highways.

Alderman Dowd

I would suggest that you also might want to put a sign as they are coming down Canal Street because if they make that turn it's too late.

Alderman Schoneman

That's a very good point and I'll work that out with the folks in the Streets Department. One more point is the reason they go up Chandler Street and down Lock Street is to avoid the intersection at Canal and Main and I can understand that. We could have done this before but now that we have the Broad Street Parkway completed, hopefully even though this will technically increase the load coming down Canal, turning right on Main to head out Concord, perhaps that load increase will ultimately move more people over to the other option if they are coming from the south which would be the Broad Street Parkway. I would also like to add that while I hope this passes I think that we are going to be looking at some other signs on some other streets in the future. There are issues on Tolles, Courtland Street and a number of others. This is a start to the process of reducing some of the heavy vehicles cut through's.

Chairman Cookson

Alderman Schoneman, I think it all comes down to enforcement. That is probably one of the major concerns about any legislative intervention that we suggest. I received a phone call but did not get to speak to the person with regard to this legislation and you are correct, once you make that turn onto Chandler Street there are many opportunities for you to take another street or make another left to get to wherever it is that you are going. What we see is that if you continue on Chandler past Lock Street then you start getting into the neighborhood and then ultimately you can go down Laton and then Courtland Street. I think Courtland Street is probably one of the last east/west routes that you would take but you then have the opportunity to go up Chester or Berkeley to get back onto Concord. This does involve more impact to that entire neighborhood and that would be a concern. I don't believe that it is just traffic leaving Canal Street or exiting but it may be traffic that is coming off of Concord or some other road that's going through the neighborhood to get to Canal Street. I think it is by-flow and I think you have to be concerned about two-way traffic and the trucks travelling those routes, again, to avoid the intersection at Canal and Main.

Alderman Dowd

Once you go up Chandler Street and the other streets that you are referring to, they are not built for heavy trucks. They get stuck because there are cars parked on both sides of the street. Prohibiting large trucks from that area, other than local deliveries, is okay with me.

Alderman Schoneman

I think you are absolutely right about the enforcement aspect of it because there are signs on some of these streets and some of them end up with heavy trucks anyway. The police department has a lot going on these days and stopping or sitting and waiting for a truck to come by is not going to be the highest of priorities. I put a lot of faith in the community policing efforts and I think some of the traffic concerns are community policing efforts. I think if the police department and the Board of Aldermen mention to the community policing folks that these are concerns then some attention will be paid. I hope we can do something about enforcement and perhaps enough to curtail some of the activity.

Alderman Dowd

For whatever reason during the major traffic times in the morning and the afternoon there is almost always a police officer at the church at the top of Chandler Street so assuming they are enforcing it there is someone there who can enforce it.

MOTION CARRIED

O-16-008

Endorser: Alderman David Schoneman

ALLOWING RESIDENTS OF SALEM STREET TO PURCHASE OVERNIGHT ON-STREET PARKING PERMITS

MOTION BY ALDERMAN SCHONEMAN TO RECOMMEND FINAL PASSAGE

ON THE QUESTION

Alderman Schoneman

As you know we have an overnight parking program and we have recently expanded into French Hill and as that rolls out from time to time there is an adjustment to be made based on circumstances that arise the we couldn't foresee and this is one of those. There is a resident on Salem Street who asked if we could consider

Salem Street as part of the program and it was determined that street is really too narrow but there are some cross streets, Cross Street is one of them and Tolles Street where some overnight parking is available and the overnight program only allows residents on those streets to buy the permits for those spots. We determined that there have been very few overnight parking passes sold on French Hill. When this legislation was first drafted about one month ago, only three passes had been sold for French Hill. To allow this constituent the ability to park his car overnight I'd like to ask that we approve allowing Salem Street residents to access the overnight parking program.

Alderman Dowd

Is there parking on both sides of the street on Salem Street and if they did park on both sides of the street, is there enough room for city vehicles, that's a pretty narrow street.

Alderman Schoneman

It is a narrow street and this will not expand overnight parking to that street it will just allow the residents to buy a pass to park on a neighboring street where there is allowed overnight parking. We had the police department, the fire department and the DPW look at a lot of streets and ultimately the number of streets that all three departments agreed on were the streets that we ultimately approved for overnight parking.

Chairman Cookson

What is the closet street that your constituent would be able to park on?

Alderman Schoneman

Tolles Street and Cross Street.

Chairman Cookson

So on either side of Salem but not on Salem?

Alderman Schoneman

Yes. I addressed that with the constituent. I told him we can't do it on Salem and would it be acceptable to him to park on any one of the other streets in French Hill but the nearest ones where overnight parking is allowed are Tolles and Cross Streets.

MOTION CARRIED

O-16-009

Endorsers: Mayor Jim Donchess
Alderman Tom Lopez
Alderwoman Mary Ann Melizzi-Golja
Alderman-at-Large Brian S. McCarthy

PROHIBITING PARKING IN PART OF LE PARC DE NOTRE RENAISSANCE FRANCAISE PARKING LOT DURING SUNDAY FARMERS' MARKETS

MOTION BY ALDERMAN DOWD TO RECOMMEND FINAL PASSAGE

ON THE QUESTION

Chairman Cookson

In the audience this evening we have Director Marchant from Community Development and I have asked her to join us to aid us in this conversation. We also have Paul Shea, Executive Director, Great American Downtown and Chris Williams from Nashua HUB and Velocity Performance. Corporation Counsel Bolton has drafted some language for us to consider this evening and I know that it was distributed to the committee members. What we have done to date is on February 24th we met and I had mentioned previously the two communications indicating that Velocity Performance and Nashua HUB were interested in some parking and that evening we granted them permission to use that lot behind Water Street and the terms of that extended from April of 2016, to April of 2017, and that included weekends, if I am correct.

Ms. Marchant

What was requested and what is included in that section of the NRO is parking that is regulated by the city that we would have charged them for so that would Monday through Friday; not holidays and not weekends; 7:00 a.m. to 6:00 p.m. The parking is free for them to use on holidays, weekends and outside of the 8:00 p.m. to 6:00 p.m. hours so there was no need for this committee to grant them permission to use those spaces at that time.

Chairman Cookson

So the conflict introduces itself when we have the farmer's market between June and October and we would like to use or the Great American Downtown would like to use that space at 4 Water Street as part of the farmer's market.

Mr. Shea

The farmer's market last year, we grew from 6 to 8 vendors on any given week to 24 at the peak of last season. We received a grant as a sub-grantee of the Nashua Regional Planning Commission from the USDA for continued promotions, growth and the incorporation of market wide EBT availability to the market. It's our goal this year to grow the market to between 30 and 36 vendors and in 2017 grow the market to 40 or more vendors. Last season we had 16 vendors really tightly set up along the bridge and then the remainder of the vendors on the Pearson Avenue lot. We maxed ourselves out in the Pearson Avenue lot and there were some aspects like the pitch of the lot that was unappealing for a farmer's market. I requested that we be able to have the farmer's market set up in the Parc Renaissance and also in the spaces in the southwest portion of the lot. The hope is for this year; we've already got 26 vendors secured and anticipate that we will be able to get to 30 by the time the market starts on June 19th. The hope is to have a dozen vendors comfortably placed on the bridge and then have between 15 and 20 situated in that area. Being able to use both the Parc and the parking spaces allows for a market arrangement that is two-sided which is a much more relaxed shopping experience. That's the intention of the legislation.

Chairman Cookson

Again, you said that was between June and October?

Mr. Shea

Yes.

Alderman Lopez

I'd like to comment that I had imagined this exact scenario when we discussed this the first time and explicitly commented if the park would be available for public use and if it would be maintained as a priority. I

understand that the HUB needs to be open Monday through Friday and possibly Saturday or Sunday but that's a public park and it's meant for public activity. I think we should remember that aspect of it. At the time the answer was well, the parking permits that we are issuing won't have any kind of impact because they are only Monday through Friday and Saturday and Sunday is free anyway. I specifically asked if the presence of Velocity and HUB going to impact any type of community events. I hope we can resolve this in a way that respects the need to use a park as a park.

Mr. Shea

That's the intention of the legislation; specifying the southwest portion. When I requested this the idea was that we did not want to interfere with access to these spaces as well as the loading in and out of the backs of the businesses on 67 – 75 Main Street. That's what this amendment is about, to specify that that would be permissible. I think there was some concern in the legislation initially that the entirety of the lot would be inaccessible but that's not the intention of the legislation. I asked the Economic Development Department to ask legal to draft an amendment to make sure that it was explicit.

Alderman McCarthy

Which are the spaces that are leased to the HUB?

Ms. Marchant

The 8 that you see that are closest to Water Street itself are metered spaces and are always available. The 6 north of that across the street are leased spaces for Water Street. As you move down the lot the next section has 2 metered spaces at the beginning and then 9 leased spaces that were already out leased. The last 11 spaces were unleased and those were granted to the Incubator for essentially a free lease for the year.

Chairman Cookson

So those last 11 spots were leased to the incubator, Nashua HUB, and that's where we left off on the evening of the 24th. All of that was granted. They get the 6 spots at the top and the last 11.

Ms. Marchant

Just to clarify, they wanted 15 spaces so they also have 4 hang tags that they can use in the metered spaces during those hours.

Chairman Cookson

So now we come to Sunday's between June and October and we've got a farmer's market and these parking spots are going to be in conflict. Do you want parking there or not want parking there?

Mr. Shea

No, we would not want parking there.

Chairman Cookson

So we have no vehicle may be parked in the southwest corner of the parking lot between 8:00 a.m. and 4:00 p.m. on Sundays between June and October and that is what the proposed language from legal is.

Ms. Marchant

That's correct. They did add a sentence on today.

Chairman Cookson

During this time period vehicles may exit the easterly portion of the lot by means of the easterly driveway. At the top of the lot where you enter is now going to become an entrance/exit.

Ms. Marchant

During that time period, that's correct.

Alderman McCarthy

Do we still have a conflict between the two uses?

Mr. Chris Williams, Nashua HUB

We are a big fan of the farmer's market and the fact that it's growing is good for the downtown and the city. With this amendment we are not as concerned with the legislation as we were when it was originally proposed. The language, as it stands in this amended form, I think we can absolutely co-exist.

Alderman McCarthy

The number of spaces that you have at that end of the lot is likely to be sufficient on a Sunday.

Mr. Williams

That's correct but a couple months ago when I was in front of this committee we had requested a total of 15 spaces and if you count the number of spots that are right off of that exit before you get to the walk down ramp, there are 14 spaces. We feel very comfortable with the number of spots that will still be accessible on those Sunday's. I think we can co-exist in a way that allows the park to be used for what it should be used for, park and recreational activities while still allowing the HUB tenants to do their business as well.

Alderman Lopez

There's a parking lot right across from Water Street that could be used for any kind of overflow need too. There may be people parking there for the farmer's market but there would still be room for anybody from HUB to park there. There's also a ramp area where you can enter the farmer's market on foot.

Chairman Cookson

Director Marchant, is there any additional information that you need to share with us? Are you comfortable with the conversation that we've had so far?

Ms. Marchant

Yes.

Mr. Shea

Great American Downtown has enthusiasm for what Nashua HUB is doing and we are very excited to see it happen and the build-out of the space looks beautiful.

Alderman Lopez

As Ward 4 Alderman, I would like to compliment both the Great American Downtown and Nashua HUB for making the downtown a success.

Chairman Cookson

I would like to thank the Ward 4 Alderman because without him we wouldn't have the Nashua HUB or the Great American Downtown.

Alderman Schoneman

The lease of the parking space was just for Monday through Friday and the weekend is open to anybody, first come, first serve.

Ms. Marchant

Correct.

Alderman McCarthy

I would point out that in the other slide that we just looked at there are a number of leased spaces that are likely to be empty on the weekends. I don't think there is a shortage of parking spaces within walking distance of the HUB building the question is just being able to get in and out of the lots.

Chairman Cookson

My only concern is the angle in parking and the ability to, depending on how crowed it is. If you have all 14 spaces with vehicles in them it might be difficult to back out and change direction and head out the exit through the entrance, but I think you are all capable drivers.

MOTION BY ALDERMAN DOWD TO AMEND O-16-009 WITH THE ADDITIONAL LANGUAGE "LE PARC DE NOTRE RENAISSANCE FRANCAISE – NO VEHICLE MAY BE PARKED IN THE SOUTHWEST PARCEL OF THE PARKING LOT AT 25 WATER STREET SOUTHWEST OF MECHANIC STREET BETWEEN 8:00 A.M. AND 4:00 P.M. ON SUNDAY'S BETWEEN JUNE 1ST AND OCTOBER 31ST. DURING THIS TIME PERIOD VEHICLES WILL EXIT VIA THE EASTERLY PORTION OF THE LOT BY MEANS OF THE EASTERLY DRIVEWAY.

ON THE QUESTION

Alderman Schoneman

I'm thinking about traffic exiting that driveway. I don't think we need any signs but those who are using it will have to exercise care.

MOTION CARRIED

GENERAL DISCUSSION - None

PUBLIC COMMENT - None

REMARKS BY THE ALDERMEN

Alderman Lopez

Out of respect for my French-Canadian constituents, they made sure I knew how to pronounce Le Parc de Notre Renaissance Francaise

POSSIBLE NON-PUBLIC SESSION

ADJOURNMENT

MOTION BY ALDERMAN SCHONEMAN TO ADJOURN
MOTION CARRIED

The meeting was declared closed at 8:24 p.m.

Alderman Sean M. McGuinness
Committee Clerk

From: James B. and Mary E. Cutter
86 Palm St., P.O. Box 69-Nasua, NH 03061
Date: April 27, 2016
To: Alderman-At-Large Mark Cookson, Chir
Infrastructure Commmittee of BOA
Cc: Jim Donchess, Mayor
Steve Bolton, Corporation Counsel
Infrastructure Committee
Subject: 88 Palm St. 1950/1971 Building Permits errors.

Dear Alderman Cookson,

The 1949 Building Permit ordinance(Art. IX, Sect. 36. Plats.) like all ordinances was not difficult to understand that each applicant was required to have exact dimensions on their plat plan layout.

But, in 1950 and 1971 the owners of 88 Palm St. violated the ord. by submitting 53.7' instead of the actual dimension of 51'. They claimed an additional 2.7' because they thought 86 Palm St. on the north did not have enough room for the 3' gap in the deed.

The Legal Dept. forgets our family will need to hire an attorney when I leave 86 Palm St. and since our driveway is curtilage, it is protected by the Constitution.

Since, those permits were approved by building inspectors we feel the City should be the ones to notify the Gilbertsons to correct their 1971 permit so our driveway can be returned to its original size.

Sincerely,

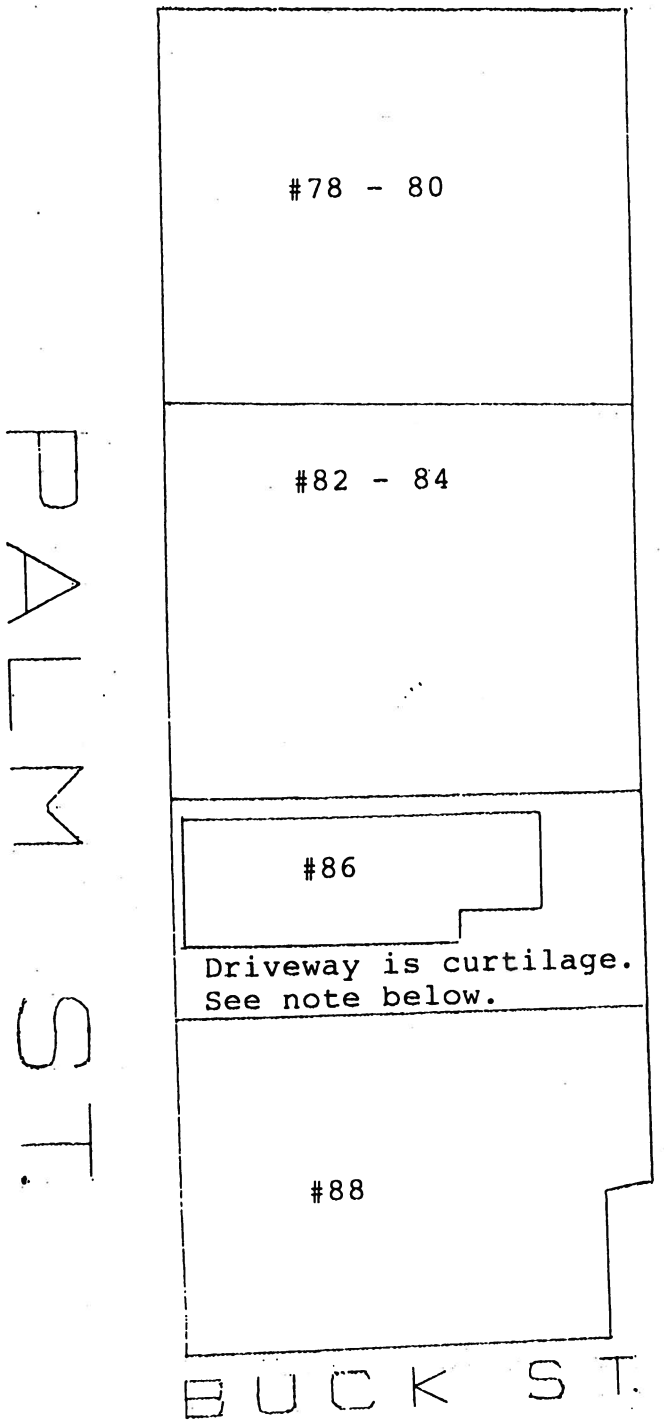
Jim

Encl. 86 Palm St. Deed Correction.

Accept & place on file

Stark & Buckley St.
Tim & Tracey.

86 PALM ST. DEED CORRECTIONS



Book 1134, page 298 of 11/26/1946. Nashua Bldg. and Loan Assoc. sold to Philippe and Simone Labrie.

Land surveyed and prop. line chisel marked was a boundary line adj. RSA 75:8 Revised Inventory that would have corrected the 86 Palm St. Deed from 30' to read 33' and remove the gap.

Survey found property is 33' wide. Driveway is 10', 3" wide.

Book 2149, page 333 on 1/12/68. Genevieve B. Caron sold to James L. and Annette Gilbertson. All deeds from 1886 to present have had about 51' to Buck Street.

Note. Curtilage like govt.-owned property, public land and railroad land are exempt from adverse possession with no statute of limitation.

ORDINANCE

PROHIBITING PARKING IN PART OF LE PARC DE NOTRE RENAISSANCE FRANCAISE PARKING LOT DURING SUNDAY FARMERS' MARKETS

CITY OF NASHUA

In the Year Two Thousand and Sixteen

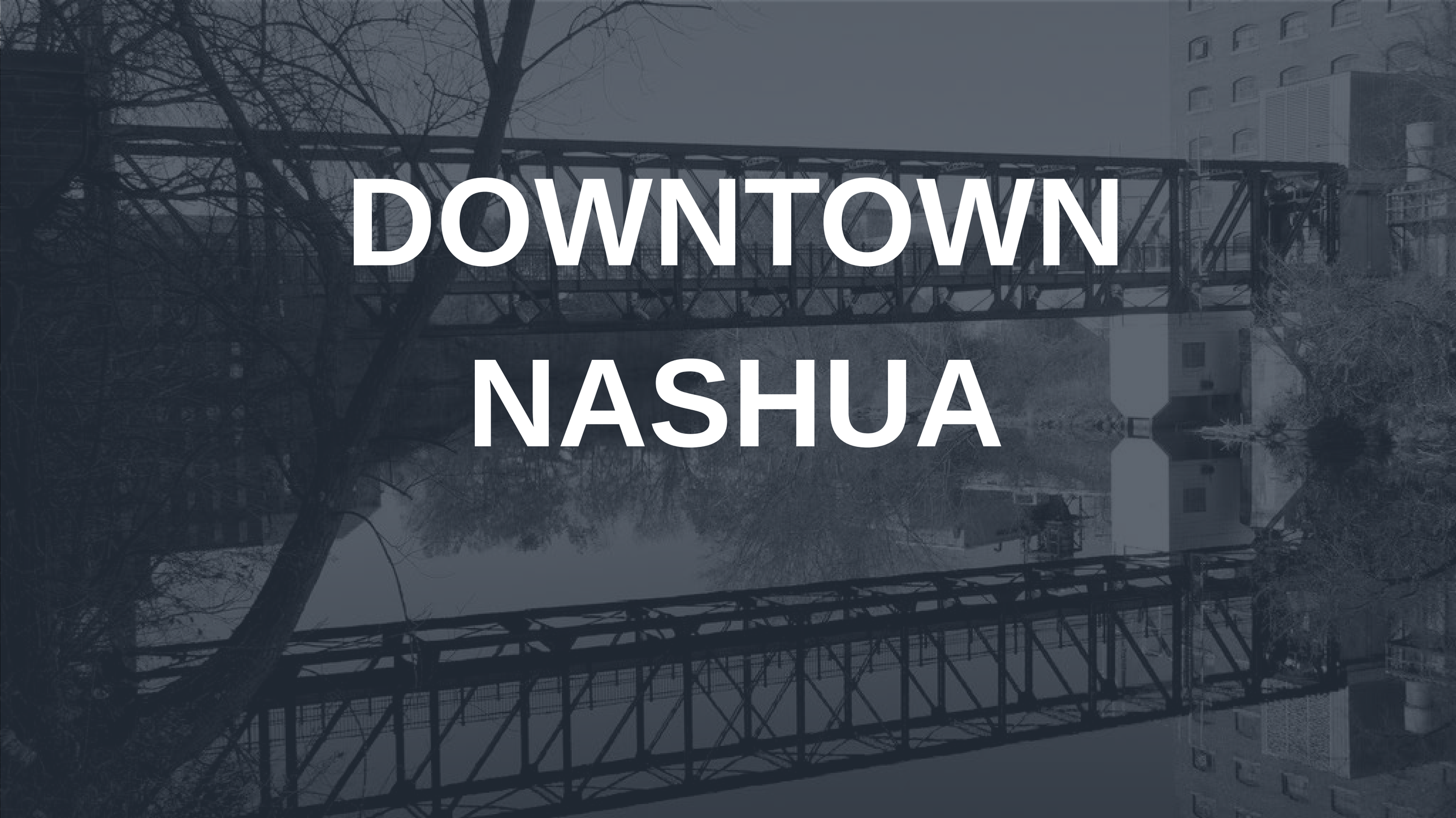
The City of Nashua ordains that Part II "General Legislation", Chapter 320 "Vehicles and Traffic", Article XII "Parking, Stopping and Standing", Section 320-75 "Parking limited in certain City parking lots" of the Nashua Revised Ordinances, as amended, be and hereby is further amended by adding the new underlined language as follows:

"**320-75. Parking limited in certain City parking lots.**

A. Lincoln Park. No vehicle shall be stationed or remain for a period exceeding four hours on the east side of the Lincoln Park parking lot.

B. Le Parc de Notre Renaissance Francaise. No vehicle may be parked in the southwest parcel of Le Parc de Notre Renaissance Francaise parking lot (25 Water Street; southwest of Mechanic Street) between 8:00 a.m. and 4:00 p.m. on Sundays between June 1st and October 31st." During this time period vehicles may exit the easterly portion of the lot by means of the easterly driveway.

This ordinance shall become effective at the time of removal and/or installation of the necessary sign(s).


DOWNTOWN
NASHUA

A VISION FOR THE FUTURE

A DOWNTOWN OF URBAN, WALKABLE, MIXED-USE DEVELOPMENT

MORE HOUSING CHOICES

The Nashua region has the one of the lowest vacancy rates (2.1%) in the state, resulting in increasing rents. Downtown is poised for the introduction of new market rate residential.

MORE ACCESS TO MARKETS

With a stronger connections to Boston, downtown can be a location to recruit entrepreneurs as well as new talent to start a new businesses and be part of our economy.

MEETING PREFERENCES

By creating an environment that appeals to all lifestyles, Nashua can capitalize on regional investments which are following national and regional trends in consumer preferences.

A VIBRANT RETAIL ECONOMY

By pairing new residential options with specific employment & retail sector growth, downtown can capture a larger share of consumer purchasing power.

THE SHARED VALUES OF OUR CITY

ELEMENTS DRIVING DEMAND FOR LIVING, WORKING, AND VISITING DOWNTOWN

ELEMENT ONE
TALENT

Our city is one of the most educated demographics in the state. Well-educated people grow of the knowledge economy.

ELEMENT TWO
EMPLOYMENT

Downtown has many high quality jobs and the city is connected to the markets in Cambridge and Boston.

ELEMENT THREE
A BEAUTIFUL CITY

Nashua has rich architecture and cultural heritage as well as excellent parks and rivers in reach of downtown.

ELEMENT FOUR
OPENESS

Downtown is accepting of people from diverse backgrounds, adding resiliency against social and economic changes.

COMMUNITY PROFILES

THE FACES OF VIBRANCY IN NASHUA'S DOWNTOWN

GRANT MORRIS
NEW SKY PRODUCTIONS

LYDIA FOLEY
PURPLE FINCH PROPERTIES

MEDINA GAUTHIER
MINT PRINTWORKS

WHAT PEOPLE WANT

WHAT ARE THE IMPACTS OF CHANGING PREFERENCES

WHAT IS DRIVING VITALITY?

A CITY RECOGNIZED FOR PROVIDING A HIGH QUALITY OF LIFE

AN ATTRACTIVE PLACE TO LIVE

Downtown Nashua is a walkable environment with many shopping and entertainment destinations.

Both regionally and nationally, consumer preferences are trending towards downtowns. Metrics such as “Walk Score” are demonstrating the added value of increased walkablity.

WHAT IS DRIVING VITALITY?

A CITY RECOGNIZED FOR PROVIDING A HIGH QUALITY OF LIFE

AN ATTRACTIVE PLACE TO LIVE

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WHAT IS DRIVING VITALITY IN DOWNTOWN

A CITY RECOGNIZED FOR PROVIDING A HIGH QUALITY OF LIFE

FRONT STREET

North End, Nashua, 03064

Commute to **Downtown Nashua**

1 min | 2 min | 1 min | 3 min View Routes

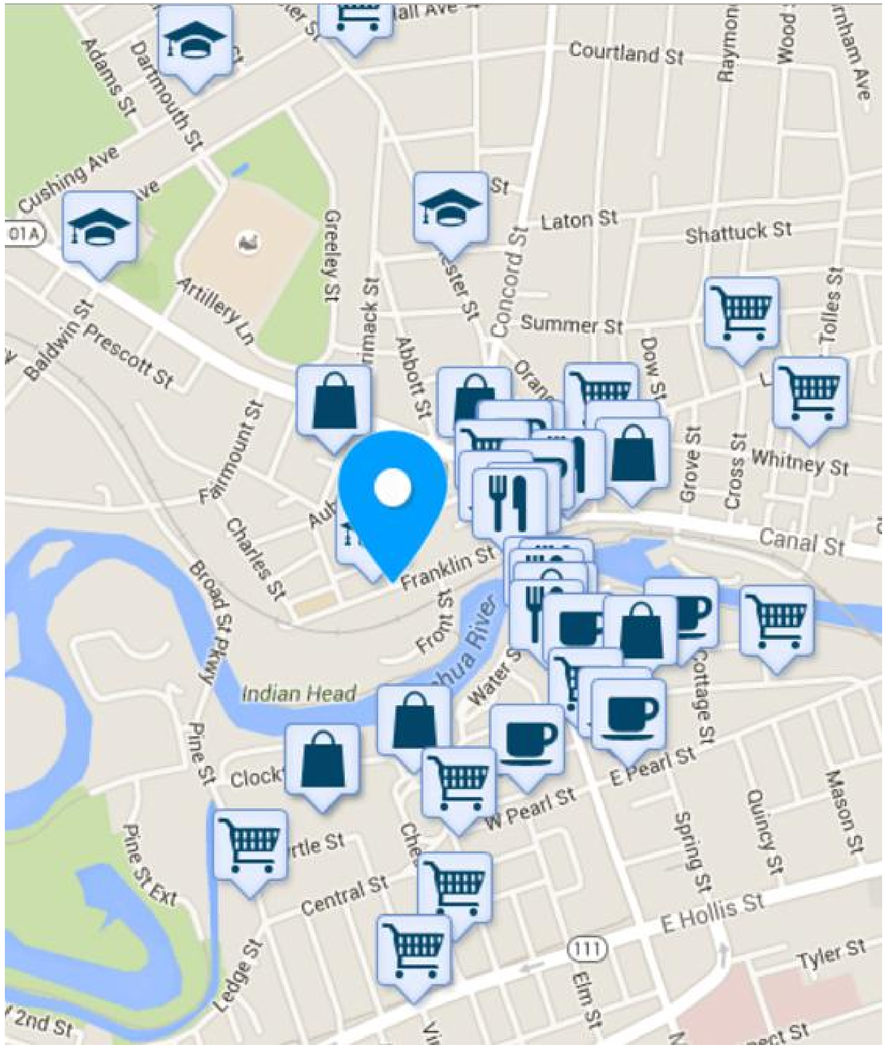
Favorite **Map** **Nearby Apartments**

Looking for a home for sale in Nashua?

Walk Score 91

Walker's Paradise

Daily errands do not require a car.

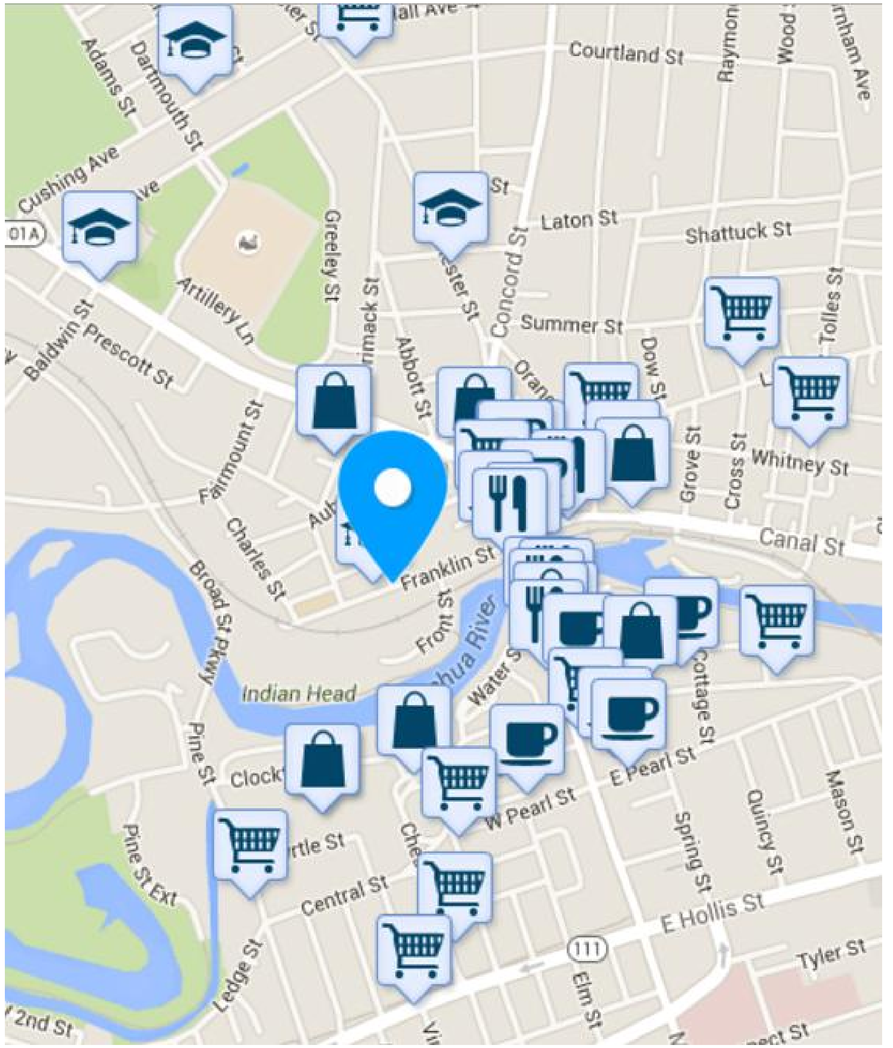


WHAT IS DRIVING VITALITY IN DOWNTOWN

A CITY RECOGNIZED FOR PROVIDING A HIGH QUALITY OF LIFE

Source: *Zillow Talk*

CityObservatory



KEY MARKET INDICATORS

NATIONAL TRENDS DRIVING INVESTMENTS IN DOWNTOWN

DEMOGRAPHICS

Are the core of revitalization

Millennial's are now the largest labor force cohort and they are voting with their wallets.

PEAK DRIVING

Fewer people are driving

Ever since the recession, Americans have been driving less & getting fewer licenses.

TECHNOLOGY

Market sector growth

The Boston metro has seen a 43% increase in STEM related industry over the last decade.

HOUSING CHOICES

Demand outpaces supply

Stronger preferences for urban living dictate more multi-family housing is needed for years to come.

CREATING OPTIONS

OFFERING MORE CHOICES FOR CHANGING LIFESTYLE PREFERENCES

Meet Jack and Laura . . .

Graphics courtesy of the NRPC Bike & Pedestrian Regional Master Plan

Jack and Laura's Annual Expenses

Important note: *Jack and Laura are fictional characters. Any similarities to actual persons, living or deceased, is purely coincidental.*

Rent & Utilities

$17,100

Student Loan Payments

$6,300

Transportation

$16,000

Childcare/Medical

$9,200

Food Expenses

$7,800

Making Ends Meet

Jack and Laura are trying to save up to buy a house, but a total of $56,400 of their income (or about 95 percent) goes to essentials like rent, groceries, and childcare. Assuming that the family spends $300 a month on clothes / electronics / household purchases and leisure/recreation activities, they would have ***no money*** left over at the end of the year.

A Better Way

A more walkable and bicycle friendly region might allow Jack to trade in his clunker of a car for a bicycle, and share Laura's modern and reliable car for longer trips. This would save the couple approximately $7,300 every year, providing them much more financial leeway to save for a house or enjoy a much needed date night out.


LionsGate
HOMES
BY RYLAND HOMES
NEW MODEL
COMING SOON
Visit Our Model at
8565 Stallion Ranch Road
in Phillips Creek Ranch
972-752-7996


United States • NH • Hillsborough Co.
Feedback
Pictometry Birdseye


BOSTON GRILL
GRILL


British Beer Company
Great Food

MIXED-USE FOR LAND CONSERVATION

Build This:

Keep This:

REALIZED DEVELOPMENT PROJECTS

CURRENT INVESTMENTS ARE STIMULATING A NEW URBAN NEIGHBORHOOD

CLOCKTOWER PLACE

Approximately 500 people, within walking distance to Main Street.

COTTON MILL APARTMENTS

The recently completed mill restoration adds 101 apartments.

LOFT 34 / FRANKLIN MILL

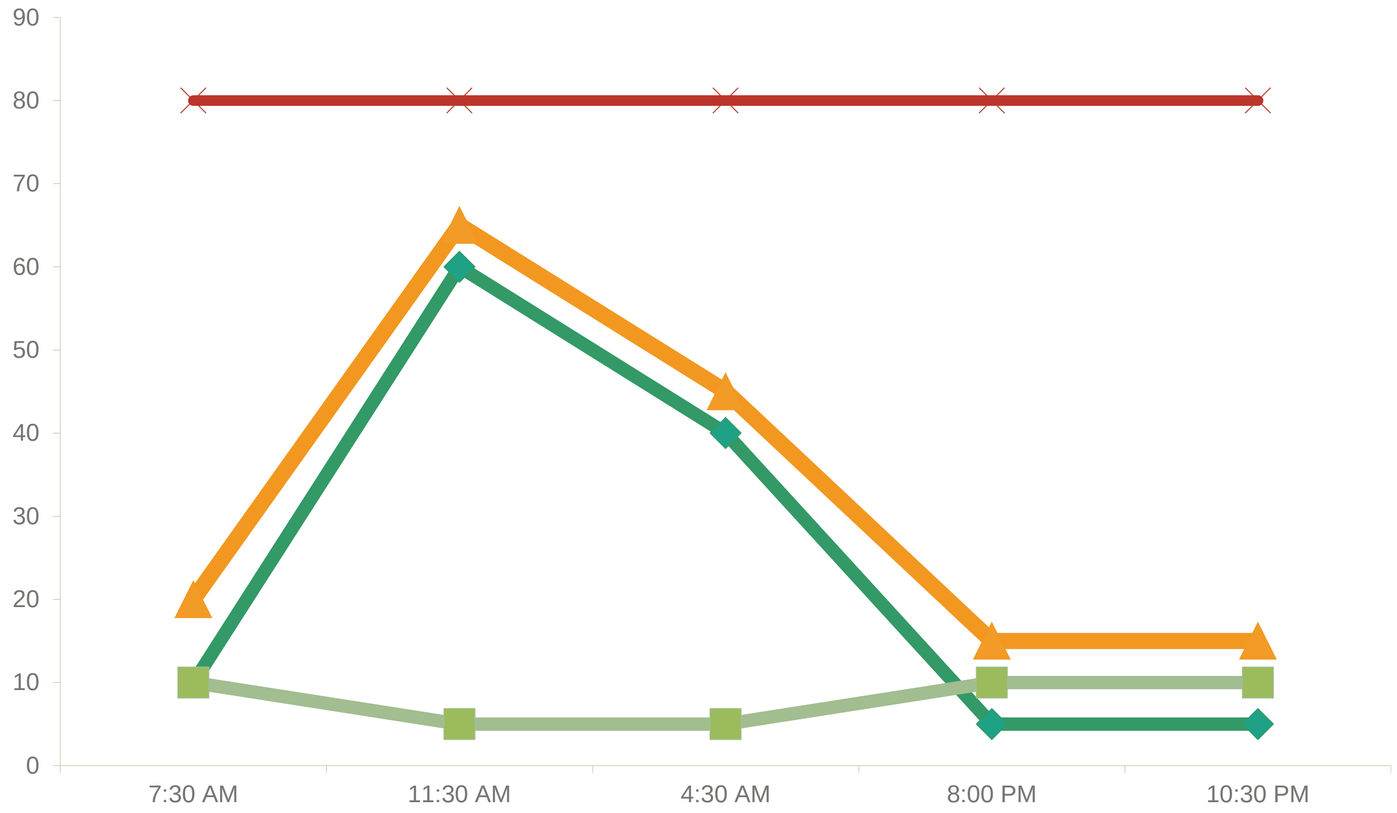
Work has started for 168 loft units in the heart of the downtown.

OPPORTUNITIES

HOW CAN DOWNTOWN BUILD ON NATIONAL TRENDS

PARKING MANAGEMENT

DAY-TIME USERS & OVERNIGHT USERS



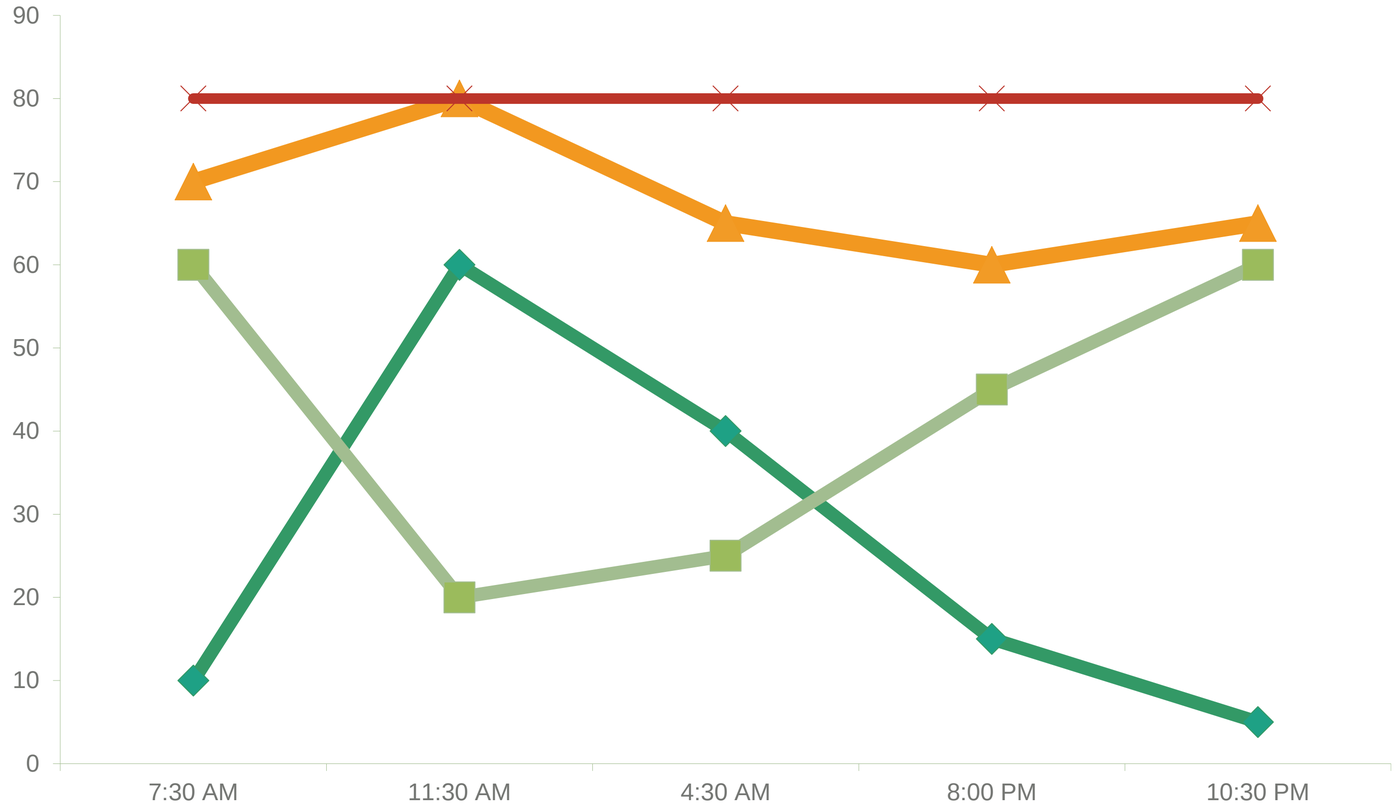
EXISTING CONDITIONS

Currently, parking lots and garages are primarily used by 9 am to 5 pm daytime worker.

Parking lots and gargages have significant capacity for overnight users.

PARKING MANAGEMENT

DAY-TIME USERS & OVERNIGHT USERS



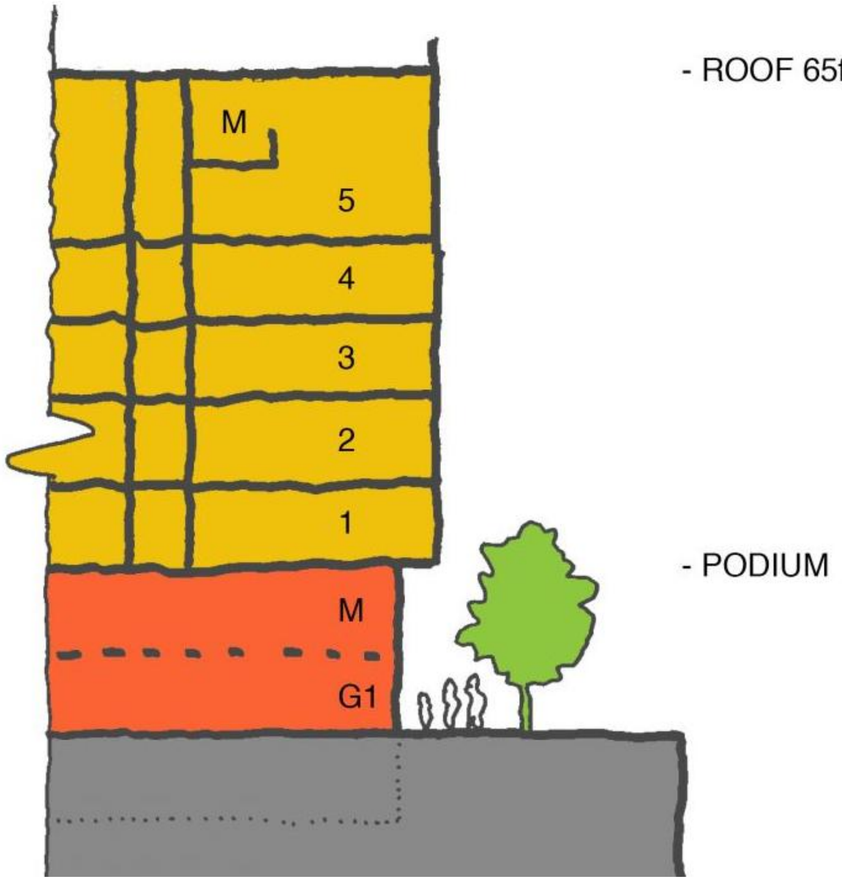
PARKING MANAGEMENT

By working to utilize the availablity of overnight parking, the city can generate new revenue fo downtown improvements.

Overnight parking also reuces the need for development projects to build expensive parking infrastructure.

MODERN CONSTRUCTION METHODS

PODIUM CONSTRUCTION CAN REDUCE CONSTRUCTION COSTS



PARKING MANAGEMENT

By working to utilize the availablity of overnight parking, the city can generate new revenue fo downtown improvements.

Overnight parking also reuces the need for development projects to build expensive parking infrastructure.

MODERN CONSTRUCTION METHODS

PODIUM CONSTRUCTION CAN REDUCE CONSTRUCTION COSTS

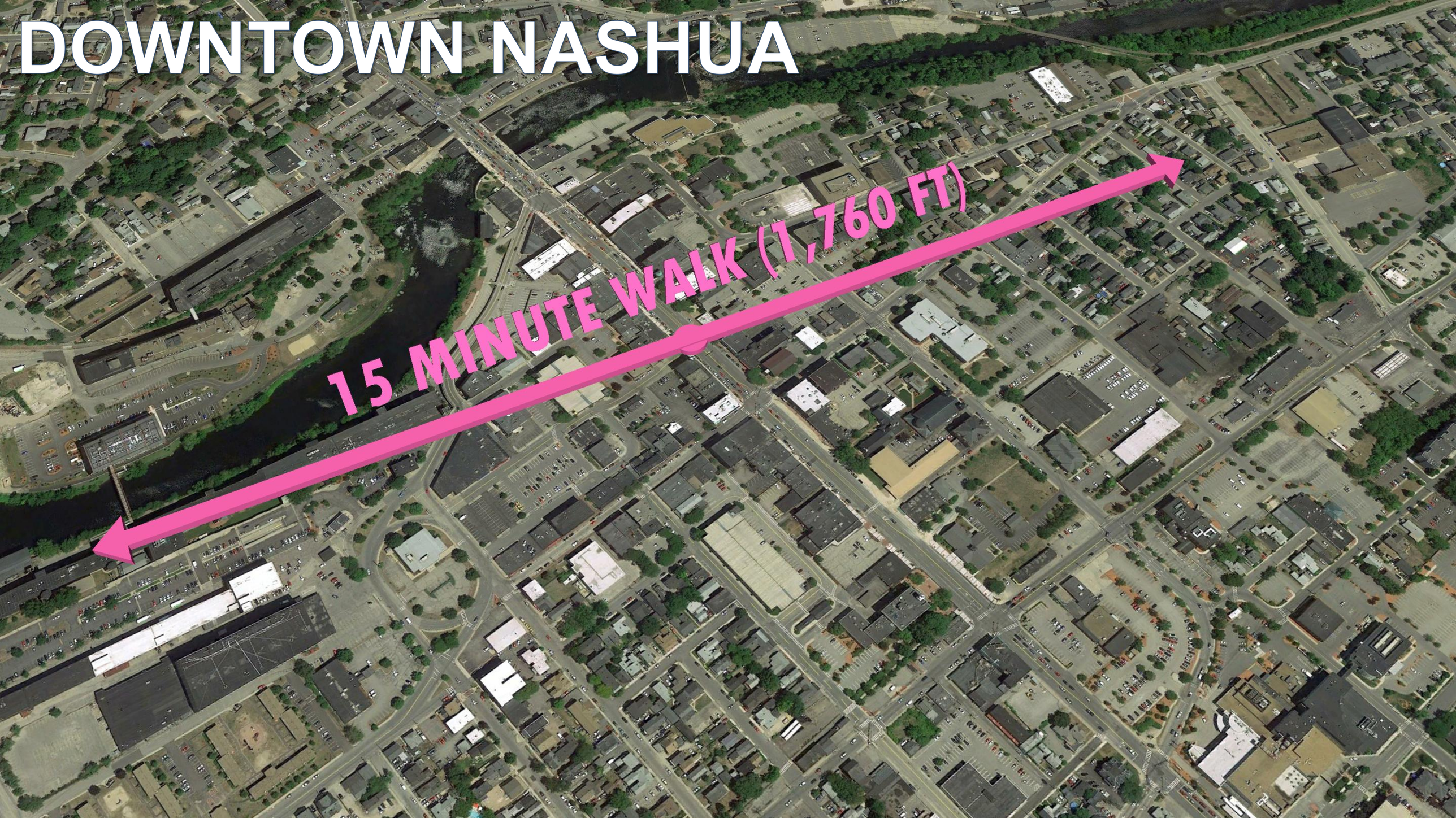
REALIZING LAND VALUE

Downtown has high land values but limited new construction. Recent new construction development have been high value but auto centric & commercial in nature.

Mixed-Use developments will allow developments to reach the full potential of their land value.

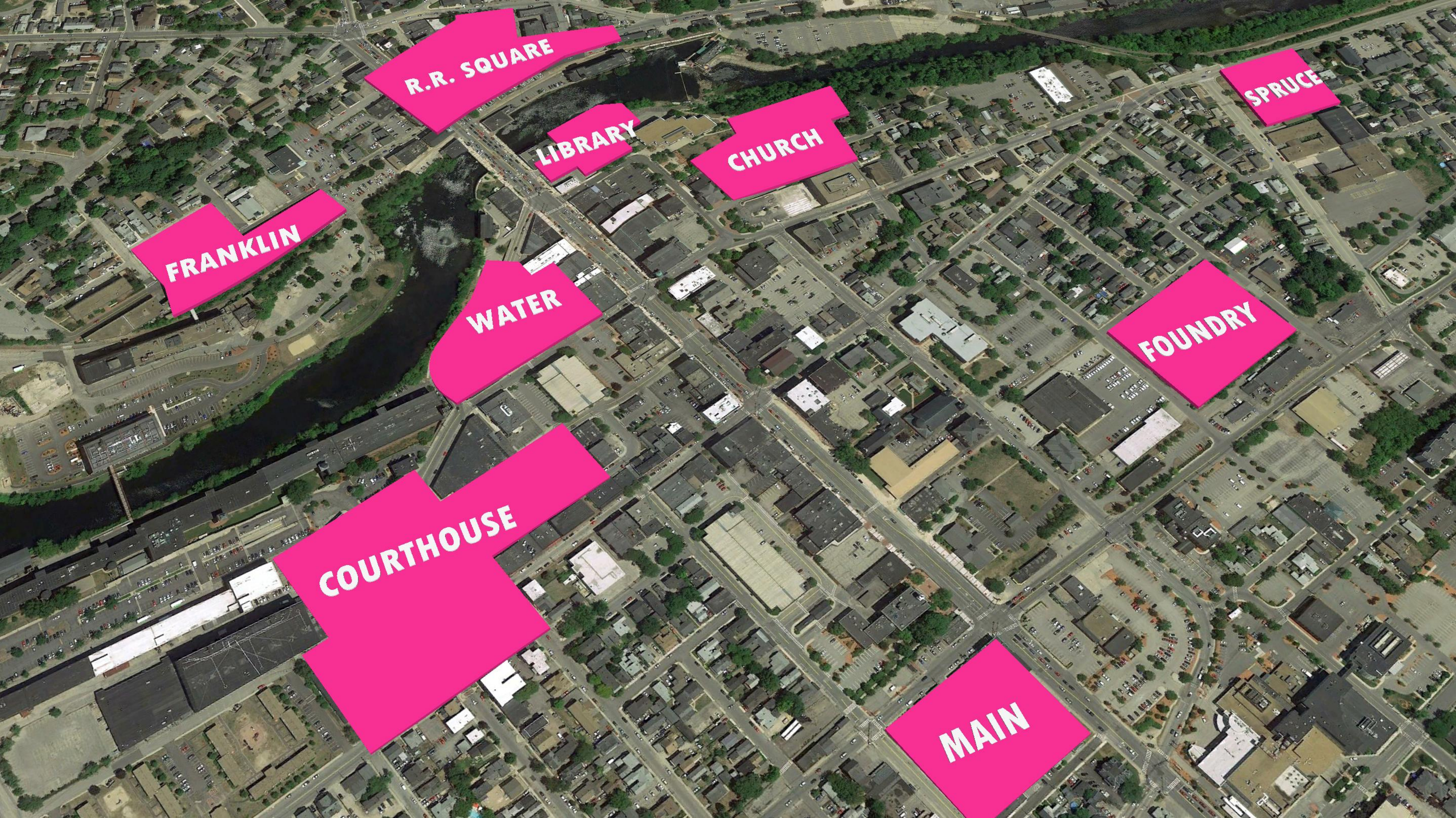
DOWNTOWN NASHUA

DOWNTOWN NASHUA

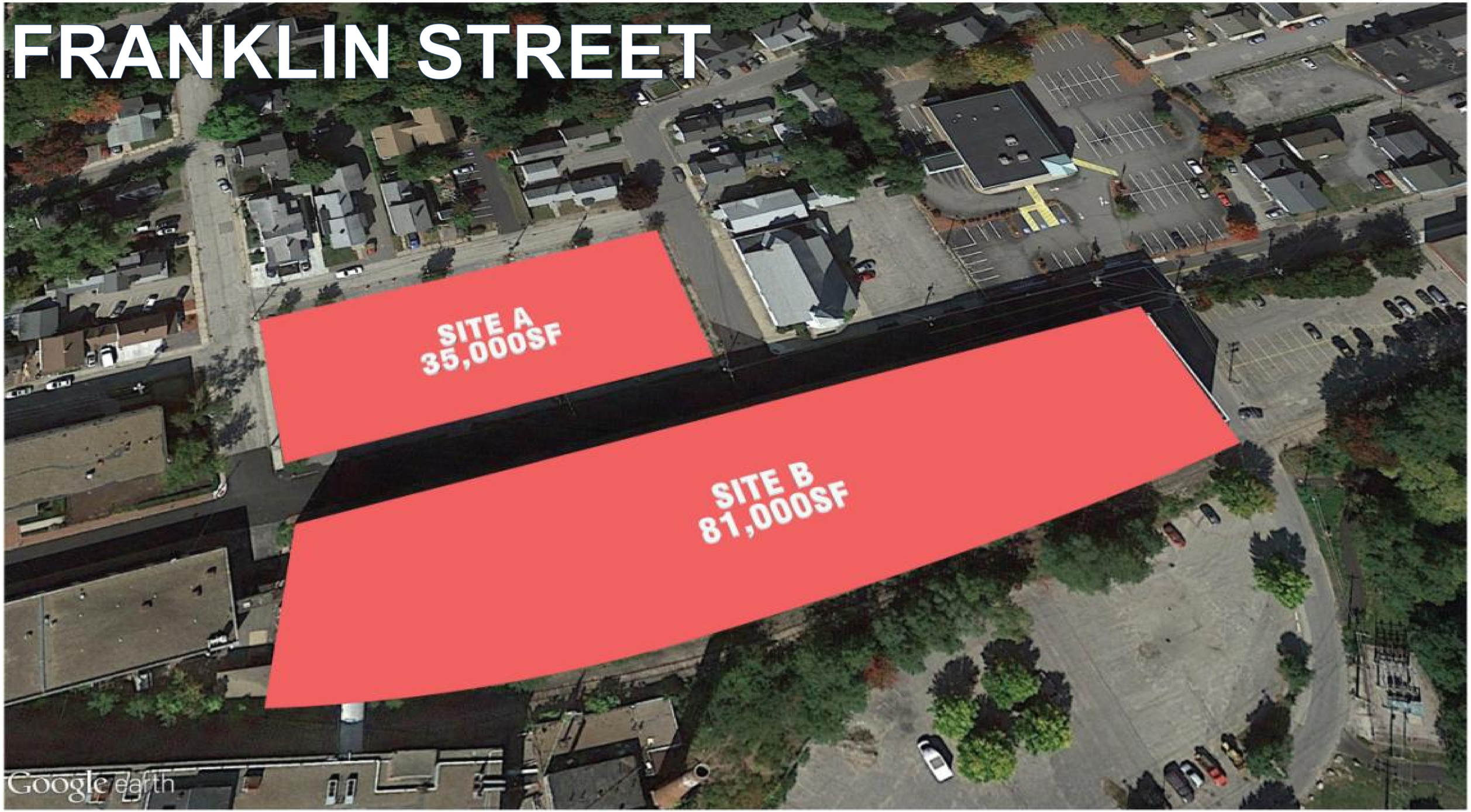



DOWNTOWN NASHUA
15 MINUTE WALK (1,760 FT)

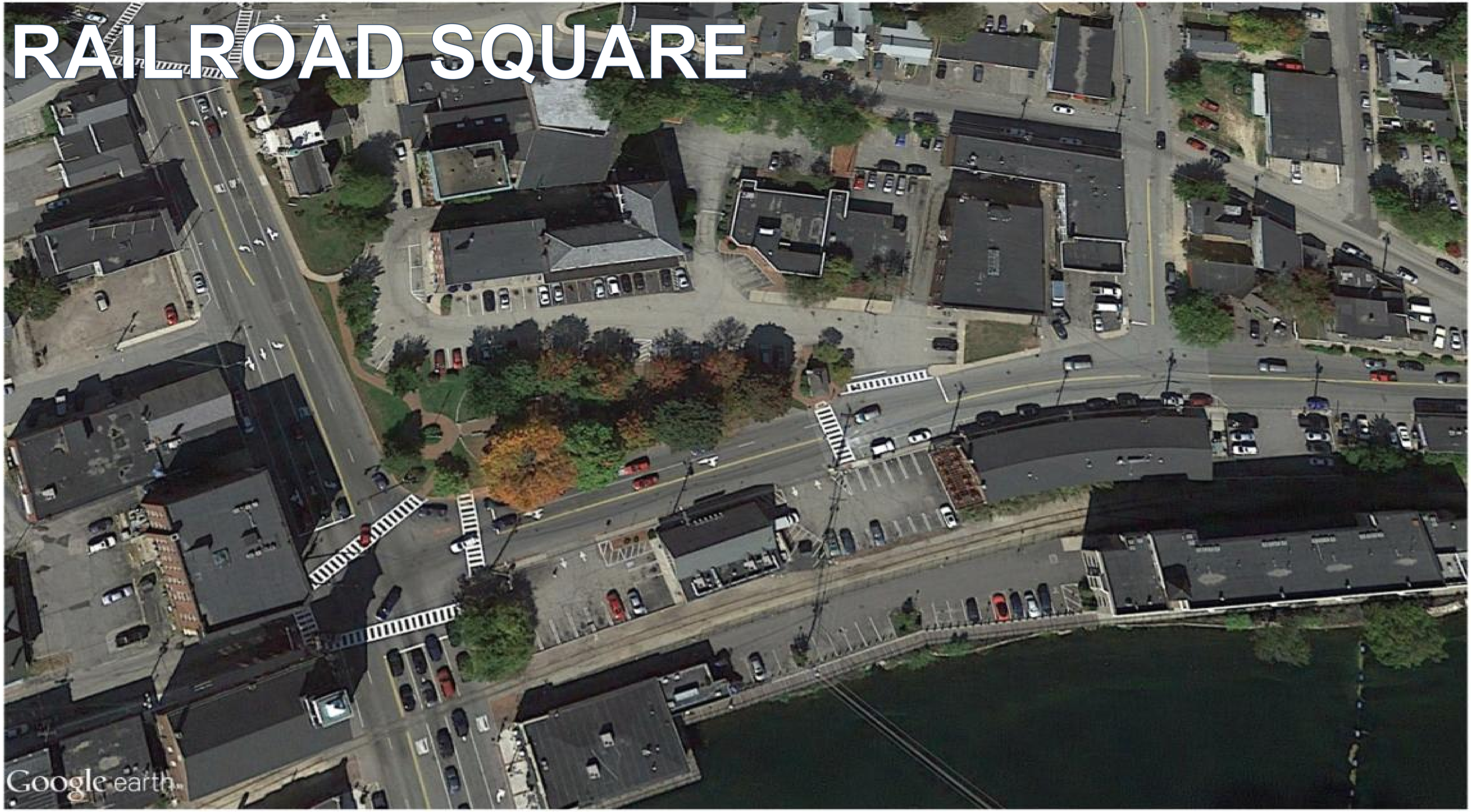

R.R. SQUARE
LIBRARY
CHURCH
SPRUCE
FRANKLIN
WATER
FOUNDRY
COURTHOUSE
MAIN


R.R. SQUARE
LIBRARY
CHURCH
SPRUCE
FRANKLIN
WATER
FOUNDRY
COURTHOUSE
MAIN

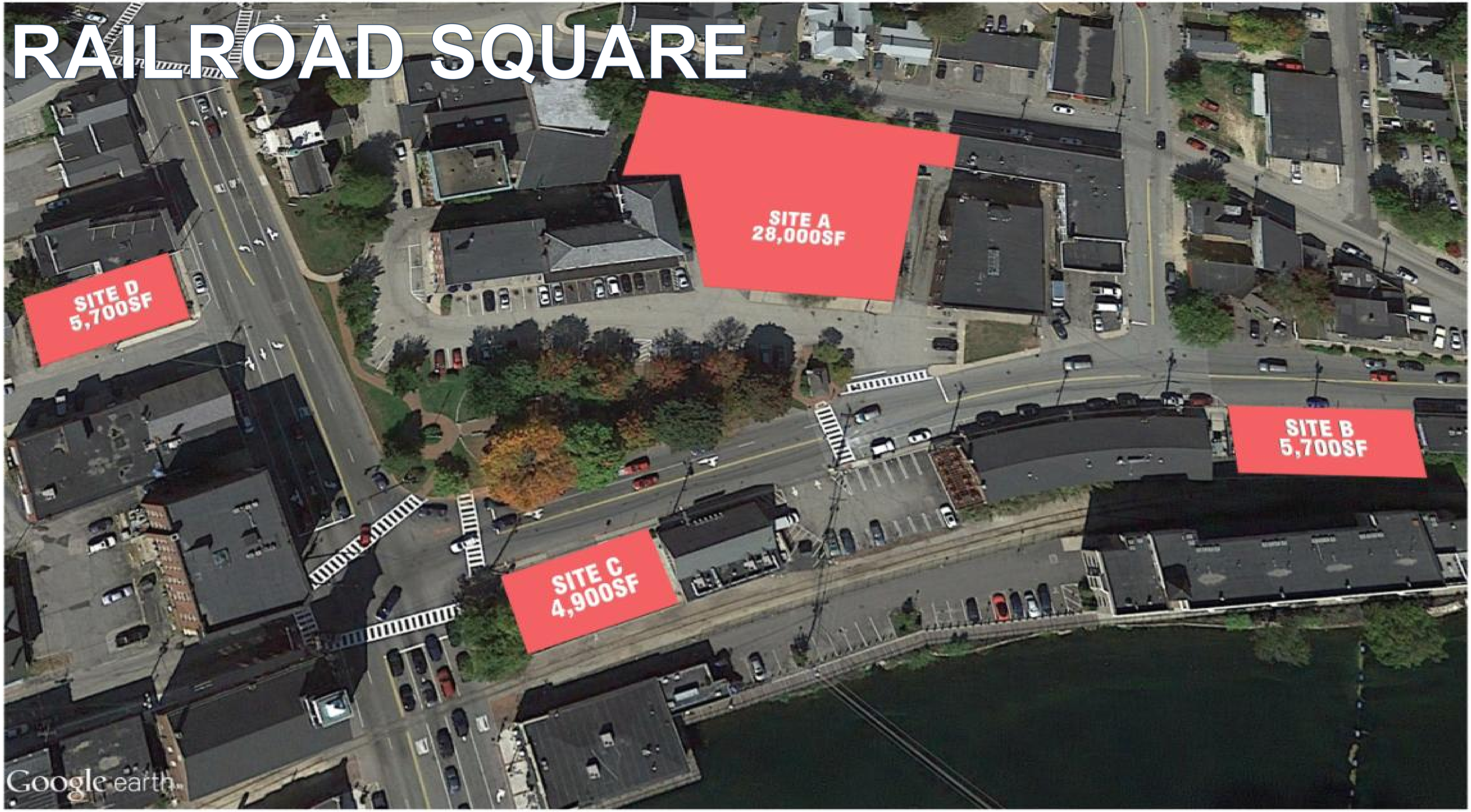
FRANKLIN STREET


FRANKLIN STREET
SITE A
35,000SF
SITE B
81,000SF
Google earth

RAILROAD SQUARE



RAILROAD SQUARE



PEARSON AVENUE


PEARSON AVENUE
SITE E
18,000SF
SITE F
16,000SF
SITE G
5,000SF
Google earth

LIBRARY PARKING LOT


LIBRARY PARKING LOT
30 TEMPLE
SITE A
78,000SF
SITE B
15,000SF
SITE C
9,000SF
LIBRARY
Google earth


LIBRARY PARKING LOT
30 TEMPLE
NEW STREET
SITE A
78,000SF
SITE B
15,000SF
SITE C
9,000SF
LIBRARY
Google earth


WATER STREET

WATER STREET

SITE A
20,000SF

SITE B
12,000SF

Google Earth


WATER STREET
SITE A
20,000SF
SITE B
12,000SF
XXX
XXX


WATER STREET
SITE A
20,000SF
SITE B
12,000SF
SITE C
11,000SF
SITE D
2,800SF

COURTHOUSE OVAL


COURTHOUSE OVAL
SITE A
29,000SF
SITE B
11,000SF
SITE G
17,000SF
SITE F
27,000SF
SITE E
21,000SF
SITE D
16,000SF
SITE H
15,000SF
SITE I
29,000SF
Google


MULBERRY STREET
Google


MULBERRY STREET
SITE B
17,000SF
SITE C
7,400SF
SITE A
12,000SF
Google


SPRUCE STREET
Google


SPRUCE STREET
NORTH SITE
77,000SF
Google

NEXT STEPS

WHAT TOOLS ARE AVAILABLE TO BUILD THE FUTURE

TOOLS FOR SUCCESS

INCENTIVES & PROGRAMS

LEVERAGE RESOURCES

Nashua offers financial resources and assistance that can help downtown grow and thrive. The following are a few of the useful tools geared for success:

R&D TAX CREDITS

The Research & Development Tax Credit program is available to business organizations that have expenditures made during the fiscal year for qualified manufacturing research and development.

BROWNFIELDS REVOLVING LOAN

Sites where expansion, redevelopment, or reuse may be facilitated by cleaning up and reinvesting in properties with environmental issues. This protects the environment, reduces blight, and takes development pressures off green spaces and working lands.

TAX INCREMENT FINANCING

A TIF can provide an attractive and viable mechanism to pay for the public improvements necessary to support desired redevelopment projects, business expansion, or renovation in specific areas desirable to the City of Nashua.

DOWNTOWN TAX RELIEF DISTRICT

Property owners who substantially rehabilitate a building located in Downtown Nashua may obtain temporary tax relief. If granted, the relief is for a finite period of time during which the property tax on the structure would not increase as a result of its substantial rehabilitation (between 5 and 13 years). In exchange for the relief, the property owner grants a covenant ensuring there is a public benefit to the rehabilitation.

A VISION FOR THE FUTURE

A DOWNTOWN OF URBAN, WALKABLE, MIXED-USE DEVELOPMENT

INCREASE HOUSING SUPPLY

Assist interested property owners in creating concepts for development which fully realize their land value. While also meeting housing demand.

BUILD NEW PRODUCTS

Create mixed use developments which utilize existing assets downtown and appeal to demographic groups looking to live in a downtown environment.

TIGHTEN BOND WITH BOSTON

Boost the quality of life downtown to ensure we attract talented people from regional employment centers to live here. Talent is much more likely to keep their business here.

CREATE PURCHASING POWER

Development will increase the median income of households in downtown. Residents are much more likely to spend money within walking distance of where they live.

The WalkUP *Wake-Up* Call: Boston

By Christopher B. Leinberger
& Patrick Lynch

The George Washington University
School of Business

The Center for Real Estate
and Urban Analysis

School of Business

THE GEORGE WASHINGTON UNIVERSITY

LOCUS | Smart Growth America
Making Neighborhoods Great Together

MAPC
METROPOLITAN AREA PLANNING COUNCIL
Smart Growth & Regional Collaboration

Northeastern University
Dukakis Center for Urban and Regional Policy

CUSHMAN & WAKEFIELD

The WalkUP *Wake-Up* Call: Boston

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EXECUTIVE SUMMARY

Metropolitan Boston is leading the country toward a walkable urban future.

That future is materializing on less than six percent of the metropolitan area's land — the same six percent that houses 37 percent of the region's real estate square footage, 40 percent of its population, and 42 percent of employment.

In the Boston metropolitan area, walkable urbanism adds value. On average, all of the product types studied, including office, retail, hotel, rental apartments, and for-sale housing, have higher values per square foot in walkable urban places than in low-density drivable locations. These price premiums of 20 to 134 percent per square foot are strong indicators of pent-up demand for walkable urbanism.

Walkable urban places are now gaining market share over drivable locations for the first time in at least half a century in hotel, office and rental apartment development. This is good news for people moving to those locations, since households in walkable urban places spent less on housing and transportation (43 percent of total household budget) than households in drivable locations (48 percent), primarily due to lower transportation costs. In addition, property tax revenues generated in walkable urban places are substantially higher than in drivable locations on a per acre basis.

Previous research has demonstrated the correlation between walkable urban places and both the education of the metropolitan work force and the GDP per capita. The current research confirms this finding: for example, since 2000, 70 percent of the population growth of young, educated workers has occurred in the walkable urban places of the Boston region.

Despite the strong momentum toward a more walkable urban future for the region, there are challenges and causes for concern. In many walkable urban places, proximity to transit is a major requirement for households and employers. However, increasing congestion in the core transit system and system fragility in the face of extreme events (such as was experienced during the blizzards of 2015) diminish the value of the system and present substantial risks that may deter investors. As a result, public sector investments in MBTA capacity and resiliency are prerequisites for the billions of dollars of private sector capital seeking to flow into walkable urban places over the coming decades.

Public transit, especially rail transit, activates walkable urbanism's potential for adding real estate value, and as this report demonstrates, that potential is ample. Therefore, policymakers must weigh the costs of funding transit against its power to increase tax revenues. With the right value capture tools in place, the increased value that transit supports could be used to fund at least a portion of the system's maintenance and future expansion.

We should also be concerned that, given the flow of capital into walkable urban places and the price premiums, the affordability of these places may be diminished. The resulting increased displacement of low-income residents to less accessible suburban locations would likely have substantial negative impacts on social equity, the environment and opportunity. As a result, it is critical to establish policies that will preserve existing affordable housing in walkable urban places and leverage private sector investments to enhance opportunities for disadvantaged families to live in high opportunity/high accessibility places. However, the ultimate solution to high housing and commercial costs is more walkable urban inventory, which will occupy less than 10 percent of the metro area's landmass. This new inventory will eventually drive down land costs, the primary reason for the price premiums.

INTRODUCTION

For decades, real estate practitioners, observers and scholars studying land use have looked through an urban-versus-suburban lens. It is not unlike the classic social science joke about the tipsy guest who drops his keys at the front door as he leaves a party. While searching under a streetlight at the curb, he is asked, "Why aren't you looking where you lost the keys?" He replies, "This is where the light is."

We have watched and analyzed the urban/suburban debate where the light was, even if that meant using the wrong approach with the wrong datasets. Our latest research, focused here on Metropolitan Boston, challenges those connected with the built environment (real estate and infrastructure), including developers, investors, regulators, infrastructure providers, social equity advocates, public sector managers, academics and citizens, to rethink the way we manage the 35 percent of our nation's wealth that is invested in the built environment.[1] This is an important recalibration that affects how we live and work and where we are educated, worship and entertained. To ignore this structural change would be akin to ignoring the impact of the drivable suburbs on the built environment more than a half-century ago.

This new research defines—in an entirely new way—the form and function of all land use in Metropolitan Boston's 3,119 square miles. This study then ranks performance for all land in the region based on two criteria: economics and social equity. The economic performance metric measures both the real estate valuations, as a proxy for GDP (a GDP measure does not exist below the metropolitan level) and the tax assessment that drives most local government tax revenues. The social equity performance metric measures access to economic opportunity and affordability in terms of both housing and transportation costs.

Today, there are two broad forms of metropolitan development:[2]

- **Drivable Sub-urban:** This development form has the lowest development density in metropolitan history. It features stand-alone real estate products, tends to be socially and racially segregated, and relies upon cars and trucks as the only viable form of transportation.
- **Walkable Urban:** This form of development has much higher density, has multiple real estate products (housing, office, retail, etc.) close to one another, employs multiple modes of transportation that get people and goods to the place and once there, is walkable.

Each form is found in both cities and suburbs. In the case of Metropolitan Boston, drivable sub-urban development can be found within Boston, in neighborhoods such as West Roxbury and Hyde Park, the many subdivisions throughout the suburbs. Likewise, Boston's Back Bay takes a walkable urban form, as does the newly opened Assembly Row, a $1.3 billion transit-oriented mixed-use development in a once gritty, former industrial part of the city of Somerville. Both drivable sub-urban and walkable urban forms of development have market support and appeal.

Drivable sub-urban has been the dominant approach to real estate development for over 60 years. Today, that is reversing; the pendulum is swinging back to walkable urban development. Market demand for drivable sub-urban development, which became overbuilt and was a major cause of the mortgage meltdown that triggered the Great Recession, appears to be on the wane in the Boston metropolitan area. Meanwhile, there is such pent-up demand for walkable urban development—as demonstrated by rental and sales price per square foot premiums—it could take a generation of new construction to satisfy the demand for walkable urban development.

Meeting this demand for new development in walkable urban areas will be a boon to the economy. Much like drivable sub-urban development benefited selected jurisdictions in the second half of the 20th century, this shift back towards walkable urbanism provides the opportunity that many urban neighborhoods, long suffering from disinvestment, have been waiting for. It will also put a foundation under the Boston regional economy and boost local government tax revenues, much like drivable sub-urban development benefited the economy and selected jurisdictions in the second half of the 20th century.

Walkable urban development calls for dramatically different approaches than drivable sub-urban to urban design and planning, regulation, financing and construction. It also requires the introduction of a new industry: place management. This new field develops the strategy and provides the day-to-day management for walkable urban places, creating a distinctive "could only be here" place in which investors and residents invest for the long term.

The comparisons between different land use forms will help direct private sector investment decisions, public sector infrastructure investments, and public policy and household decisions about where to live, work and play. In addition, place management organizations could use the metrics developed in this report to assess year-over-year performance and progress made in achieving strategic objectives. Finally, the research can assist in setting urban policy of the Commonwealth, especially for economic development, housing and transportation.

KEY FINDINGS

- **The Boston market is showing substantial and growing pent-up demand for walkable urbanism, demonstrated by significant and increasing real estate premiums on average for walkable urban real estate over drivable sub-urban in all product types.**

  Metro Boston is on the leading edge of the national structural shift towards walkable urbanism. The weighted-average valuation for walkable urban real estate is 37 percent higher than drivable sub-urban real estate in the region.

This premium has been growing since 2004 for for-sale residential and office, and since 2007 for retail.

The 2014 valuation premiums of walkable urban product types compared to drivable sub-urban are:

- **OFFICE** 134%
- **HOTEL*** 120%
- **RENTAL APARTMENTS** 54%
- **RETAIL** 41%
- **FOR-SALE RESIDENTIAL** 20%
- **TOTAL** **37%**

** (only WalkUP premium over Edge City available)*

- **Walkable urbanism has successively increased its market share of new income property development (office, retail, hotel, rental apartments) over the last three real estate cycles. From 1992-2000, 27 percent of the region's new income property development located in walkable urban places. That share increased to 39 percent in the 2001-2008 cycle, and stands at 46 percent for the most recent cycle (2009-present).**

  Those overall numbers hide important distinctions in walkable urbanism's share by real estate product type. Office and hotel development appear to be leading the trend toward walkable urbanism while rental apartments have just begun to trend toward it. Retail continues to have a drivable sub-urban orientation.

  The key real estate product not included in income property is for sale-residential. The available data indicates that it, like retail, is maintaining a drivable sub-urban orientation. Most for-sale residential square footage, including single-family and condominiums, continues to be developed in drivable suburbs. However, the data also shows that the homebuilding industry is not producing nearly as many for-sale units as it has historically. Single-family residential permits are dramatically down from historic peak levels during past economic expansions. For example, as Metro Boston nears the top of this economic cycle, single-family residential permits per capita are lower than the trough in the late 1980s and early 1990s recession. The 20 percent average price premium for walkable urban for-sale residential may not be enough for the regional homebuilders to change their business model. **The decline in single-family permits and the rise in multifamily construction, mostly rental, may also represent the consequence of demographic shifts. MAPC has projected that nearly two-thirds of housing demand in the coming decades could be for multifamily units.**

- **The harsh winter of 2014-15 showed how vulnerable the future of WalkUPs and Walkable Neighborhoods are, given the years of deferred maintenance and the need for expansion of the MBTA rail and bus transit system**. Nevertheless, this research shows that the majority of economic growth in the region will be in walkable urban places. The lifeblood of this type of economic development is rail and bus transit, as well as bike friendliness and walkability. Not maintaining a "state of good repair" and expanding rail transit, but also bike and walking infrastructure, would put the economic development future of the region at risk.

ECONOMIC CONCLUSIONS

- **There is a wide spectrum of economic performance among the WalkUPs. The most significant and active WalkUPs are in the region's Inner Core adjacent to the MBTA rapid transit system.** They have seen significant investment during the recent cycles and comprise a growing share of office, hotel, and rental housing in the region.

- **From a public finance perspective, WalkUPs generate 12 times more property tax revenue per acre than Edge Cities. Walkable Neighborhoods generate six times more property tax revenue per acre than Drivable Sub-divisions**. The above numbers refer to gross tax revenues, as opposed to net fiscal impact (revenues minus costs).

SOCIAL EQUITY CONCLUSIONS

- **WalkUPs tend to offer high levels of accessibility, low transportation costs, and high opportunity in terms of proximity to employment. However, the cost of housing in WalkUPs is high and standardized test scores tend to be lower compared to the rest of the region**. In contrast, Walkable Neighborhoods generally exchange higher affordability for average accessibility and opportunity. Edge Cities have reasonable opportunity levels, but low accessibility due to generally requiring car ownership, causing a corresponding increase in transportation costs. Drivable Sub-divisions are the least accessible, not particularly affordable due to the high transportation costs, and they do not provide many work opportunities as compared to WalkUPs. Nonetheless, they do offer lower housing costs for lower income families and the highest standardized test scores.

- **Considering both housing and transportation costs, WalkUPs and Walkable Neighborhoods are more affordable than their drivable sub-urban counterparts**. On average, a four-person family earning the median income and living in a WalkUP is projected to spend 42 percent of their income on housing and transportation and 43 percent in Walkable Neighborhoods, versus 45 percent in Edge Cities and 48 percent in Drivable Sub-divisions.

- **There is large variation within the WalkUPs themselves on the various measures of social equity**. Generally, WalkUPs that are on the outer reaches of the commuter rail are affordable to live in but do not provide much work or school opportunity, and have little access to other higher opportunity areas. In contrast, WalkUPs near the Boston core benefit from the MBTA transit system, where residents can access many nearby WalkUPs quickly, but frequently have unaffordable housing costs. There is a clear tradeoff between accessibility/opportunity and housing affordability. **Few WalkUPs provide both relatively affordable housing and good access to opportunities.**

LAND USE DEFINED

The Rise of Walkable Urbanism

After decades of development in Edge Cities, the pendulum has swung back in favor of walkable urban development. Now the dominant development pattern in Metropolitan Boston—and many other metropolitan areas in the country—walkable urbanism is the driving force in real estate.

During the second half of the 20th century, the dominant development model was the familiar drivable sub-urban approach, whether regionally significant (Edge Cities) or local serving (Sub-divisions). Most real estate developers and investors, government regulators and financiers had come to understand this model extremely well, turning it into a successful development formula and economic and local government fiscal driver.

The best way of understanding this trend toward drivable sub-urbanism is to examine the relative market share of WalkUPs and Edge Cities. For example, although the Edge Cities housed only 23 percent of the region's office inventory in 1992, 43 percent of the region's new office development located in them from 1992-2000, meaning they were gaining market share. WalkUP office space, which made up 49 percent of the region's office inventory in 1992, garnered only 17 percent of the region's new office development over the same period, a loss of market share. This pattern of Edge City market share gain at WalkUPs expense was likely just a continuation of a trend that had begun in the 1950s and that was typical of most office markets across the nation.

However, starting in the 2001-2008 real estate cycle, the pendulum began slowly moving back towards the market demanding walkable urban development. Across the country in selective metros and in Boston, downtowns began to revitalize, inner-ring Suburban Town Centers redeveloped, and Inner Core Walkable Neighborhoods saw substantial reinvestment.

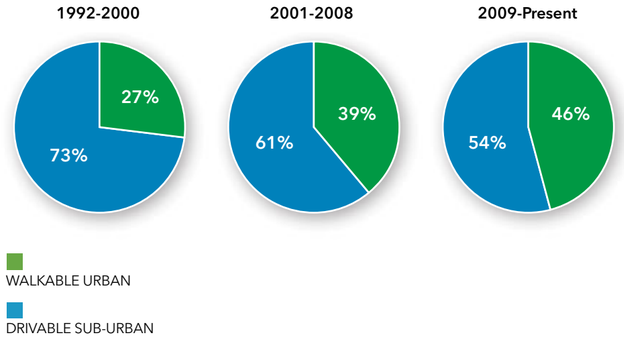
Starting in the 2000s real estate cycle (2001-2008) in Metro Boston, and accelerating in the current real estate cycle (2009-present), there has been a shift towards walkable urbanism in most, though not all, product types. George Washington University's previous research on metropolitan Washington, D.C. and metropolitan Atlanta found a similar shift in market share in regionally significant income property development (for-sale housing was not studied).

From 2009 to the present, 48 percent of metro Washington's income property development occurred in WalkUPs (0.9 percent of the land in the region), as compared to only 24 percent from 1992-2000. Even in metro Atlanta, which for many is the poster child of sprawl, 50 percent of income property development since 2009 has occurred in WalkUPs (one percent of the land in the region), as compared to only 10 percent in the 1990s real estate cycle.

The increasing Boston regional market share for walkable urbanism has also been accompanied by rising rents and valuation premiums over the drivable sub-urban counterparts. These premiums now occur for all product types that we evaluated. Until more walkable urbanism emerges, the premiums will likely persist. This situation benefits walkable urban property owners but raises critical issues of affordability, a topic discussed in the social equity section of this report.

Share of Income Property During the Last Three Real Estate Cycles

Income Property = Office, Retail, Hotel, and Multifamily Apartments



Form Meets Function

Two potential economic functions and two land use forms yield a four-cell matrix that categorizes 100 percent of metropolitan land.

In metropolitan areas, the economic use of land is categorized as either *regionally significant* or *local serving*. Regionally significant places have concentrations of employment (base, or export, jobs and regional serving employment), civic centers, institutions of higher education, major medical centers and regional retail, as well as cultural, entertainment and sports assets. Local-serving places are bedroom communities dominated by residential development that is complemented by local serving commercial and civic uses, such as primary and secondary schools, police and fire stations, and so on. Generally speaking, regionally significant places are where the metropolitan area earns its living while local serving places are where people spend their non-work lives.

When form meets function, a simple matrix emerges that shows how 100 percent of a metropolitan area's land is used.

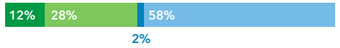
Metropolitan Land Use Options in the United States

	REGIONALLY SIGNIFICANT	LOCAL SERVING
WALKABLE URBAN	**WALKUP** (Walkable Urban Place) • Office Space ≥ 1.4M sq ft *-OR-* Retail Space ≥ 340,000 sq ft • WalkScore ≥ 70.5 • Avg intersection density ≥ 100 per sq mile	**WALKABLE NEIGHBORHOOD** • WalkScore ≥ 65 • Avg intersection density ≥ 100 per sq mile
DRIVABLE SUB-URBAN	**DRIVABLE EDGE CITY** • Office Space ≥ 1.4M sq ft *-OR-* Retail Space ≥ 340,000 sq ft	**DRIVABLE SUB-DIVISION** • All land not allocated to other categories

Key Metrics by Land Use

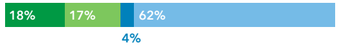
REGIONAL LAND
Share of Regional Land by Land Use Type:

POPULATION
Share Residing in Each Land Use Type:



EMPLOYMENT
Share of Employment in Each Land Use Type:

ASSESSED VALUE
Share of Region's Total Assessed Value & Property Tax Revenue by Each Land Use Type



OFFICE INVENTORY
Share of Region's Office Inventory Housed in Each Land Use Type:

WALKUP
WALKABLE NEIGHBORHOOD
DRIVABLE EDGE CITY
DRIVABLE SUB-DIVISION

Land Use *Defined*

Methodology

The methodology employed in this report has its basis in research described in the Brookings Institution report, *Walk This Way*,[3] and used in two prior *WalkUP Wake-Up Call* reports by the GW School of Business focused on Washington, D.C.[4] and Atlanta.[5]

The Boston research team reviewed and compiled data from CoStar, Cushman and Wakefield, and parcel data provided by MAPC to make preliminary identifications of major commercial concentrations. These commercial concentrations were initially separated into walkable and drivable by using Walk Score. MAPC provided average Walk Scores by census block, which had been averaged from sample points provided by Walk Score. Those census blocks within the commercial concentrations with average Walk Scores over 70.5, the threshold established in the *Walk This Way* report, were selected for further study as WalkUPs. Those commercial concentrations with Walk Scores below 70.5 were considered for analysis as Edge Cities or Emerging WalkUPs.

For each WalkUP candidate, boundaries were refined based on a review of aerial photographs, established or commonly held neighborhood boundaries or place-management districts and input from local residents and real estate professionals. Ultimately the boundaries were finalized by the experienced judgment of our team, which included professionals from MAPC, Northeastern University's Dukakis Center and the Center for Real Estate and Urban Analysis at George Washington University School of Business. In addition, boundaries were drawn with the recognition that a single walkable place tends not to exceed 600 acres, based upon experience and the limitations people are willing to walk, generally agreed to be between 1500 and 3000 feet.

In each case, the WalkUPs are made up of whole census blocks. We made the decision to use census blocks as the most basic components of each defined geography to facilitate the data aggregation process.

After boundaries were established, average Walk Scores and intersection densities for each WalkUP candidate were calculated, and data on the commercial real estate inventory was aggregated from CoStar. Average Walk Scores for each WalkUP represent the weighted average Walk Score of each census block within the WalkUP, weighted by the land area of each census block. The average intersection density is derived from EPA's Smart Location Database, which provides estimates of the intersection density per square mile by census block group, excluding those intersections that are primarily for exclusive automobile-use, such as Interstate on and off ramps, etc.

To be considered an established WalkUP, each candidate had to meet the following criteria:

- **WALKSCORE:** Average value ≥ 70.5
- **INTERSECTION DENSITY:** Average ≥ 100 per square mile
- **OFFICE & RETAIL SPACE:**
  - **Office:** ≥ 1.4 million square feet
    and/or
  - **Retail:** ≥ 340,000 square feet

Candidates that did not meet the criteria were reclassified as Edge Cities, emerging WalkUPs or local-serving neighborhoods. For emerging WalkUPs, the minimum Walk Score criteria was reduced to 65, the intersection density per acre threshold reduced to 85, and the space requirements reduced to 90 percent of the established number, e.g. 1,260,000 square feet of office or 306,000 square feet of retail.

Edge Cities or regionally significant drivable locations were identified as places that had a minimum of either 1.4 million square feet of office or 340,000 square feet of retail but did not meet walkability criteria for Established or Emerging WalkUPs. Boundaries were drawn based on a review of CoStar data and aerial photographs for commercial concentrations.

Walkable Neighborhoods were identified as those census blocks with average Walk Scores of at least 65 and intersection densities of at least 100 per square mile within a quarter mile of the center of the census block.

ECONOMIC RANKINGS: METHODOLOGY & SOURCES

Building-level rent information was aggregated to the defined geographies to generate the analysis of rent premiums. For the office rent premium and inventory analysis we used a combination of data from Cushman and Wakefield and CoStar. In general, where Cushman and Wakefield data for a particular building was available, it was used. When not, the CoStar data was substituted. All office rents represent the weighted average, full-service asking rent per square foot. Averages were weighted according to square feet, e.g. large buildings influenced the average more than small buildings.

For rent and square footage information of the remaining income property categories, including retail, multifamily apartments, and hotels, we relied on CoStar and STR. In a few cases, no rent data was available for any buildings within a WalkUP geography. In those cases, rents per square foot were estimated based on the correlation between the average assessed value per square foot and average rents in geographies where rent information was available.

For purposes of the economic rankings, for-sale housing prices were converted into annual rents per square foot by estimating the annual mortgage payment, assuming a 30-year fixed mortgage at a four percent interest rate, adding the property tax associated with each jurisdiction, and a homeowners' insurance premium of $.50 per square foot.

Estimates of market value premiums for walkable urban places, as described on page 24, are based on the average rents per square foot for each product type as determined above, and cap rates, which we estimated based on transaction data provided by Cushman and Wakefield. In each case, we assumed that expenses as a percentage of rent revenue were constant across both walkable urban places and drivable locations. The average rent, less the assumed expense ratio, divided by the average cap rate, determined the valuation estimates. The estimates of value premiums were compared to actual differences in per-square-foot transaction prices between walkable urban places and drivable locations to ensure they were reasonable. To be clear, these estimates represent averages based on sample data—individual transaction values may deviate significantly from these estimates.

Assessed value estimates and the estimate of the total square footage in each geography are based on the Massachusetts Land Parcel Database, a state-level database that aggregates and attempts to harmonize property assessment data from all the various towns in Massachusetts. This dataset has some limitations. Different towns do not always have consistent standards for measuring square footage and classifying land use. In addition, the dataset is not entirely current—a few towns have only provided data through 2009, while others are current through 2014. Nonetheless, it is the most comprehensive source available for assessed values and residential square footage.

SOCIAL EQUITY RANKINGS: METHODOLOGY & SOURCES

The following data sources were used to calculate the social equity metrics.

- **Percentage of the region's working-age population accessible by transit:** EPA Smart Location Database
- **Non-Car Commute Share:** American Community Survey 2007-2011
- **Housing and Transportation Costs:** The Department of Housing and Urban Development's Location Affordability Portal. http://www.location-affordability.info/
- **School Proficiency:** Massachusetts data on average reading proficiency by school, for elementary schools and middle schools. Each census block was assigned the average proficiency of the three nearest schools. Scores for all geographies are based on the average of all census blocks in the geography weighted by each block's population. http://www.doe.mass.edu/infoservices/reports/
- **Housing Cost Burdens:** The Department of Housing and Urban Development

Note that we considered using a variety of additional measures in the social equity rankings, such as accessibility to and from each geography by automobile, the percentage of housing that is subsidized, and the local unemployment rate, among others. For the most part, these variables were found to be highly correlated with the variables listed above, such that they did not meaningfully change the results.

The Five Types of WalkUPs in Boston

There are seven possible types of regionally significant WalkUPs in any metropolitan area. Metro Boston has only five of these WalkUP types.

Based on previous analyses of other metropolitan areas, there are seven types of possible WalkUPs in a metropolitan area: Downtown, Downtown Adjacent, Urban Commercial, Urban University, Regional Urban Centers (referred to as Suburban Town Center in previous studies), Redeveloped Drivable Commercial, and Greenfield/Brownfield. Each of these WalkUP types has a different history, product mix, and transportation infrastructure, though all are trending toward mixed-use, high-density walkable urban places.

In Metro Boston, there are no established Redeveloped Drivable Sub-urban Commercial or Greenfield/Brownfield developments, though the metro area will soon have one. Assembly Square, located at the Sommerville site of a former Ford assembly plant, is now classified as emerging, but will quickly move into the ranks of the established as it is built out.

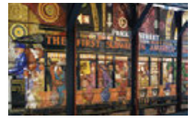
There is also a sub-class of WalkUPs that is important for future development, known as Innovation Districts. These knowledge-economy, high-tech, maker- and software-focused WalkUPs often co-locate around universities. As defined by Bruce Katz and Jennifer Wagner of the Brookings Institution, these are "geographic areas where leading-edge anchor institutions and companies cluster and connect with startups, business incubators, and accelerators. They are also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office, and retail."[6] The best example in the metro area is Kendall Square/MIT, one of the most important models in the country of an Urban University-based Innovation District. Another Innovation District is the Seaport, a Downtown Adjacent WalkUP east of Downtown Boston.

1 Downtown

Examples: *Downtown BID, Financial District*

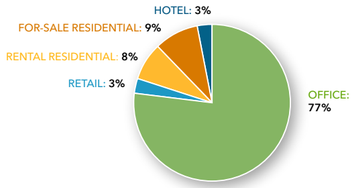
Downtowns are the original section of a metro area's principal city. In Boston, the Downtown Business Improvement District and the Financial District are combined to form the Downtown in the region as defined by this research.

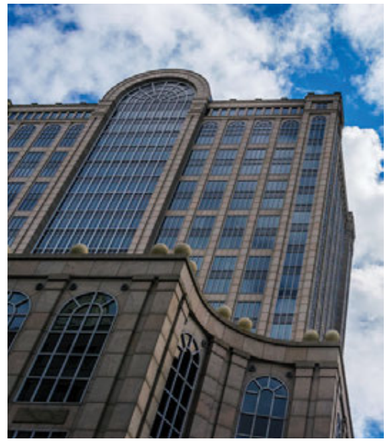
As is typical of Downtowns, office space is the dominant use, though for-sale and rental residential are the fastest growing uses in recent years and are expected to continue to expand.

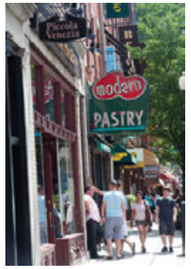


Product Mix: **Downtown**

Average % of Total Square Footage







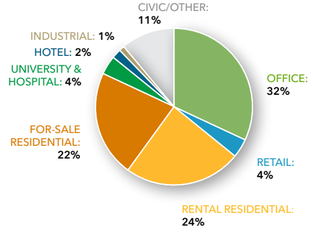
2 Downtown Adjacent

Examples: *Back Bay, Beacon Hill, Chinatown, North End, Seaport, South End, West End*

Immediately adjacent to Downtown Boston, these WalkUPs usually have a lower density than Downtown and possess a unique character from Downtown and from one another. They have a more balanced mix of space than Downtown, with almost equal portions of residential and office/retail space. The result is usually a lively, 24-hour environment.

Product Mix: **Downtown Adjacent**

Average % of Total Square Footage



3 Urban Commercial

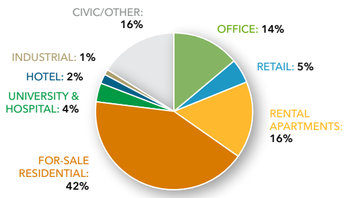
Examples: *Allston, Cambridgeport, Central Cambridge, Charlestown, Coolidge Corner, Dudley Square, East Cambridge, Fields Corner, Kenmore/Fenway, Mission Hill, North Dorchester, North New Bedford/Acusbnet Ave., Porter Square/Davis Square, Roxbury, South Boston*

Historically local-serving neighborhood commercial, Urban Commercial WalkUPs generally declined economically after World War II but, in recent years, they have found a new economic role.

Urban Commercial WalkUPs in Metro Boston are dominated by residential real estate (58 percent) and are marked by more retail and less office space than Downtown or Downtown Adjacent places. The retail in Urban Commercial WalkUPs is generally characterized as urban entertainment, such as restaurants and nightclubs, but also, including boutique shops, and furniture and home décor stores.

Product Mix: **Urban Commercial**

Average % of Total Square Footage

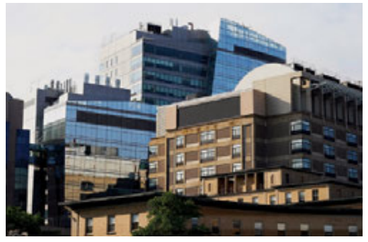


4 Urban University

Examples: *Harvard Square, Longwood Medical Area, Lower Allston, MIT/Kendall Square, Northeastern, Tufts*

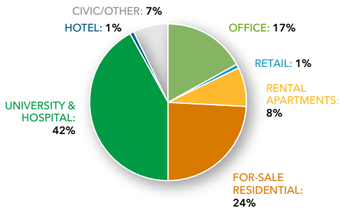
In these WalkUPs, universities and other institutional owners, such as medical facilities or government research centers, are the dominant landowners. These landowners gauge the "success" of their development not in terms of rent they may be able to collect, but in their ability to attract talent (professors, students, administrators, etc.).

The presence of these anchor institutions can also present opportunities for Innovation Districts to develop. As mentioned above, MIT/Kendall Square is one of the country's leading examples of an Innovation District. University space (classrooms, laboratories, hospitals, general office, and dorms) is the largest use, followed by off-campus housing, both rental and for-sale. Office space represents 17 percent, showing the commercialization of university research and desire to be near the university campus. Retail is very small (one percent), which is an opportunity; only Harvard Square has created a critical mass of retail in this type of WalkUP.



Product Mix: **Urban University**

Average % of Total Square Footage



5 Regional Urban Center

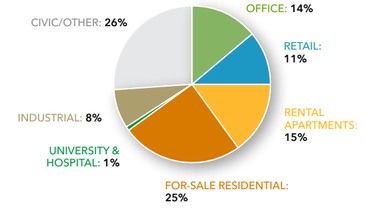
Examples: *Arlington, Attleboro, Brockton, Downtown Beverly, Downtown Fall River, Downtown Gloucester, Downtown New Bedford, Downtown Peabody, Downtown Quincy, Downtown Salem, Downtown Worcester, Fitchburg, Framingham, Haverhill, Lawrence, Lowell, Lynn/Central Square, Malden Center, Marlborough, Newburyport, Norwood, Plymouth, Taunton BID, Walkefield, Waltham, Watertown, Woburn*

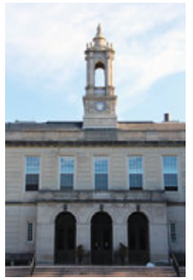
Typical Regional Urban Centers (referred to as Suburban Town Centers in previous reports) are 18th- or 19th-century towns that were swept up in the sprawl of the metropolitan area after World War II. Laid out before the automobile, they have a walkable urban grid and historical buildings that preserve the memory of the place from the more vibrant pre-World War II era. Following decades of decline, many have found a new economic role.

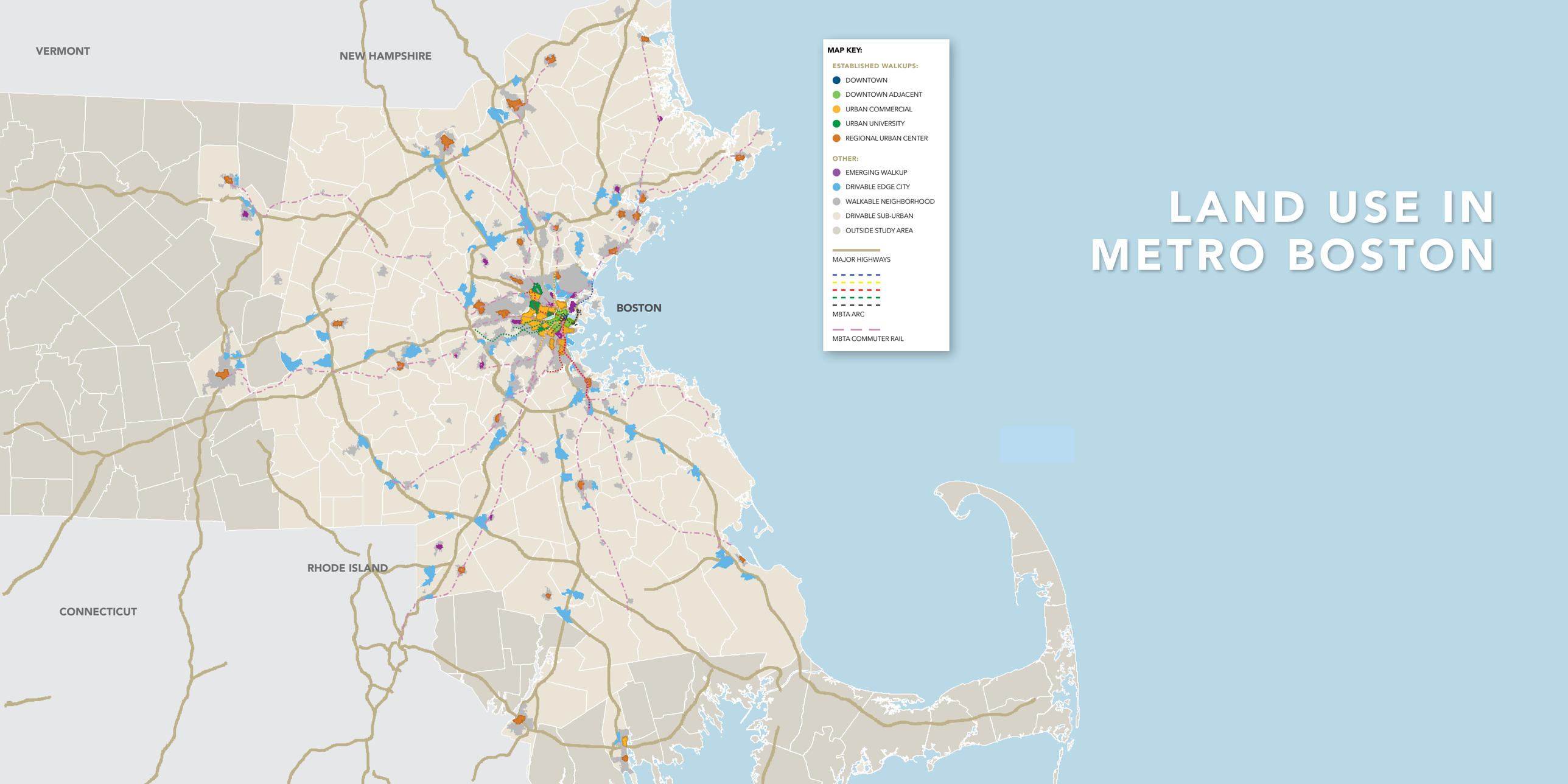
Regional Urban Centers have less office space than Downtown or Downtown Adjacent areas and relatively more retail as a percentage of the total space. Of all the WalkUPs, this is the only type to have any appreciable industrial space, though this is likely due to historical legacy more than anything. Increasingly, these are becoming growing concentrations of rental and for-sale residential, as well as the return of employment and retail. These WalkUPs are also concentrations of civic spaces.

Product Mix: **Regional Urban Center**

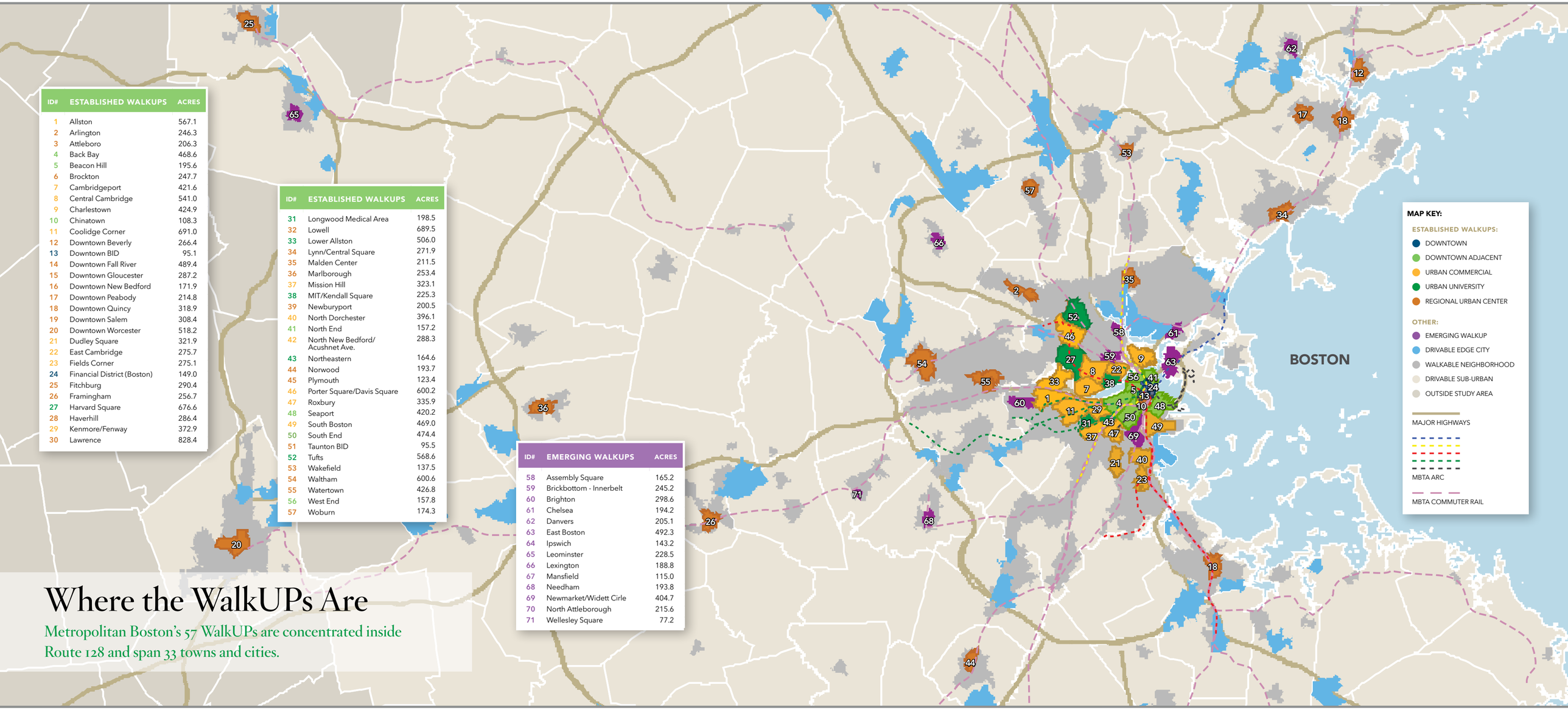
Average % of Total Square Footage







LAND USE IN METRO BOSTON



ID#	ESTABLISHED WALKUPS	ACRES
1	Allston	567.1
2	Arlington	246.3
3	Attleboro	206.3
4	Back Bay	468.6
5	Beacon Hill	195.6
6	Brockton	247.7
7	Cambridgeport	421.6
8	Central Cambridge	541.0
9	Charlestown	424.9
10	Chinatown	108.3
11	Coolidge Corner	691.0
12	Downtown Beverly	266.4
13	Downtown BID	95.1
14	Downtown Fall River	489.4
15	Downtown Gloucester	287.2
16	Downtown New Bedford	171.9
17	Downtown Peabody	214.8
18	Downtown Quincy	318.9
19	Downtown Salem	308.4
20	Downtown Worcester	518.2
21	Dudley Square	321.9
22	East Cambridge	275.7
23	Fields Corner	275.1
24	Financial District (Boston)	149.0
25	Fitchburg	290.4
26	Framingham	256.7
27	Harvard Square	676.6
28	Haverhill	286.4
29	Kenmore/Fenway	372.9
30	Lawrence	828.4

ID#	ESTABLISHED WALKUPS	ACRES
31	Longwood Medical Area	198.5
32	Lowell	689.5
33	Lower Allston	506.0
34	Lynn/Central Square	271.9
35	Malden Center	211.5
36	Marlborough	253.4
37	Mission Hill	323.1
38	MIT/Kendall Square	225.3
39	Newburyport	200.5
40	North Dorchester	396.1
41	North End	157.2
42	North New Bedford/ Acushnet Ave.	288.3
43	Northeastern	164.6
44	Norwood	193.7
45	Plymouth	123.4
46	Porter Square/Davis Square	600.2
47	Roxbury	335.9
48	Seaport	420.2
49	South Boston	469.0
50	South End	474.4
51	Taunton BID	95.5
52	Tufts	568.6
53	Wakefield	137.5
54	Waltham	600.6
55	Watertown	426.8
56	West End	157.8
57	Woburn	174.3

ID#	EMERGING WALKUPS	ACRES
58	Assembly Square	165.2
59	Brickbottom - Innerbelt	245.2
60	Brighton	298.6
61	Chelsea	194.2
62	Danvers	205.1
63	East Boston	492.3
64	Ipswich	143.2
65	Leominster	228.5
66	Lexington	188.8
67	Mansfield	115.0
68	Needham	193.8
69	Newmarket/Widett Cirle	404.7
70	North Attleborough	215.6
71	Wellesley Square	77.2

Where the WalkUPs Are

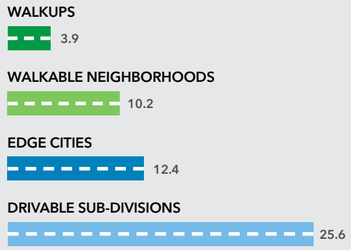
Metropolitan Boston's 57 WalkUPs are concentrated inside Route 128 and span 33 towns and cities.

Geographic Findings

Metropolitan Boston has more WalkUPs than any other metro area in the U.S., due its large number of Regional Urban Center and Urban Commercial WalkUPs.

- **There are 57 Established WalkUPs in Metro Boston in 2015.** This equates to approximately one WalkUP per 88,000 people. Established WalkUPs range in size from 95 to 691 acres (average is 337 acres) and account for one percent of the total land area in Metro Boston.
- **In addition, there are 14 Emerging WalkUPs.** These are places that do not yet contain a critical mass of commercial square footage or walkability to qualify as established WalkUPs. They represent 0.2 percent of the regional land area. Many of these places are sufficiently walkable from a Walk Score ranking, but miss the space quantity thresholds. These include the walkable cores of Lexington, Leominster, and Needham. In addition, we identified several former industrial locations in the Inner Core that nearly meet the walkability and space criteria now and likely will in the future. For example, Assembly Row in Somerville is a new mixed-use development project in a former drivable location, which recently completed its first phase. Assembly Row does not quite have enough space to meet the thresholds for established WalkUPs but its second phase is about to break ground, which will qualify it as established.
- **Established WalkUPs are the densest of all the metropolitan development options, but they still leave substantial opportunity for infill development and redevelopment.** The established WalkUPs have an average gross floor-area-ratio (FAR) of .82 though it ranges widely, from .25 to 6.6. This suggests that substantial opportunities remain for infill development and/or redevelopment in nearly all WalkUPs, even in places perceived to be built out. For comparison, the average FARs of Edge Cities in Metro Boston is 0.14; meaning WalkUPs are nearly six times denser. Walkable Neighborhoods have a 0.33 FAR and are eight times denser than Drivable Sub-divisions, which have a 0.04 FAR.
- **Twenty-six percent of the metropolitan area's jobs are located in WalkUPs and nine percent of are located in Edge Cities.** Given that approximately two-thirds of the entire region's office inventory and 30 percent of the industrial is located in these regionally significant places, it is likely that a majority of the region's base, or export, jobs, are located in them, using only 3.6 percent of the region's land. In other words, the metropolitan area earns the bulk of its living in a small percentage of its land mass. WalkUPs have the highest job density, an average of 33.6 jobs per acre, compared to only five jobs per acre for Edge Cities, four for Walkable Neighborhoods, and 0.9 for Drivable Sub-divisions.
- **Seventy-five percent of established WalkUPs are served by rail transit.** The percentage rises to nearly 100 percent for the WalkUPs ranked highly for economic performance, underscoring the importance of transit service to successful urbanism. Nonetheless, as the one-quarter of Boston WalkUPs lacking transit demonstrate, rail transit is not essential. Assuming a regional desire for more economic growth, WalkUPs not served by transit today make the most logical locations for future transit stations when the system expands to insure built-in ridership and promotion of that growth.
- **Residents and employees of WalkUPs and Walkable Neighborhoods likely get more physical activity.**[7] The established WalkUPs have an average of 186 intersections per square mile, followed by 118 for the Walkable Neighborhoods, dropping to 33 for Edge Cities, and 22 for Drivable Sub-divisions. Previous studies have shown that intersection density is one of the strongest predictors of walking and reduced driving, even more so than population density, distance to transit, and other factors.[8] Intersection density positively correlates with the amount of physical activity, controlling for gender, age, and education.[9]
- **The average length of road per capita, which is a proxy for infrastructure elements such as water and sewer lines, electric power, broadband, and most other infrastructure categories, is three times more for drivable development versus walkable development.** Although established WalkUPs have more road length on a per acre basis than the other metropolitan development options, on a per capita basis (residents and employees), WalkUPs have lower road length, therefore less overall infrastructure costs per capita. On a per capita basis, Metro Boston's Edge Cities require 3.2 times more road length than WalkUPs.[10] Drivable Sub-divisions require 2.6 times the road length of Walkable Neighborhoods.

Average Road Length per Capita
(Linear Feet)



Land Use in *Metro Boston*

Product Findings

For the first time ever, the size and share of all real estate products in Metropolitan Boston has been tabulated.

BY LAND USE OPTION

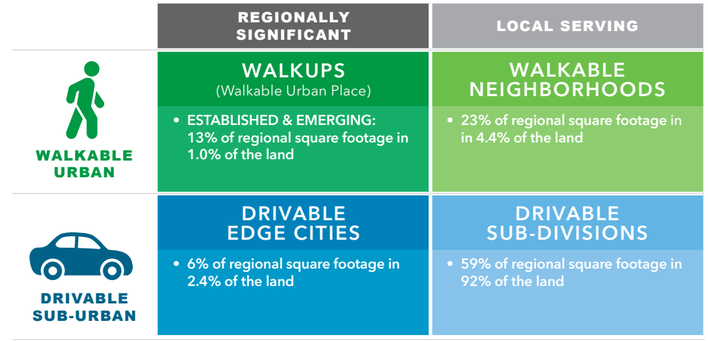
The 3,119 square miles that comprise Metropolitan Boston contain approximately 5.5 billion square feet of built square footage. Approximately 3.5 billion (63.6 percent) of this total square footage is for-sale housing: homes, two- and three- family homes, townhouses, and condominiums. About six to 12 percent of this for-sale housing is actually rented.

The remaining two billion square feet is either income-producing real estate—office, retail, rental apartments, industrial, flex space, hospitality, and health care—or owner-occupied properties, such as government buildings, universities, schools, and churches.

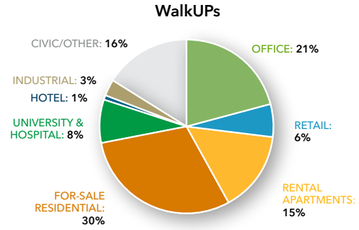
Metro Boston's 5.5 billion square feet of real estate breaks down into the following product types:[11]

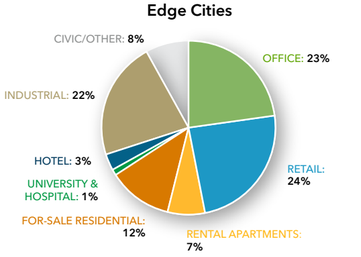
Product Type	*Sq Ft*	*% of Total*
FOR-SALE RESIDENTIAL	3,440 MM	63%
RENTAL APARTMENTS	293 MM	5%
OFFICE	326 MM	6%
RETAIL	222 MM	4%
INDUSTRIAL	283 MM	5%
HOTEL	40 MM	1%
CIVIC/INSTITUTIONAL/OTHER[12]	890 MM	16%
TOTAL	**5,494 MM**	**100%**

Share of Residential & Income-Producing Square Footage by Land Use Type



Share of Square Footage of Metropolitan Property Types in WalkUPs vs. Edge Cities





The product mix of WalkUPs and Edge Cities is substantially different. For Edge Cities, the three dominant property types are retail, office, and industrial. Together, they account for 69 percent of the total square footage. For WalkUPs, residential, office, and civic/institutional space are the major property types. Edge Cities tend to be where people go to shop and work. WalkUPs tend to be where people live, work, shop, attend university, and engage in civic activities.

PRODUCT TYPE
VALUATION PREMIUMS

The data in Metro Boston indicate a substantial shift in new product delivery towards walkable urban development over the past three real estate cycles. WalkUPs, especially those in the Inner Core of the metro area, are also showing strong and growing rent and for-sale price premiums over drivable sub-urban locations, both Edge Cities and Sub-divisions. These premiums exists for all product types studied: office, retail, rental apartments, and for-sale residential. Walkable Neighborhoods seem to enjoy slight premiums for residential space over Sub-divisions, particularly when comparing areas of similar median income. But so far no premium has materialized for office or retail located in Walkable Neighborhoods.

Increasing rent premiums also have social equity implications, since they correspond to declining affordability for low- and moderate-income households who are already living in WalkUPs (or who would like to move there.)

OFFICE

- **WalkUP office rents average $39.55 per square foot, which is 78 percent higher than Edge Cities average of $22.34.** In 2001, the gap between WalkUPs and Edge Cities was already large—at approximately 61 percent—but clearly, it has grown.
- The office market preference for WalkUPs is also demonstrated by prevailing capitalization rates, known as "cap rates" in the real estate industry. Cap rates are a means of valuing an annual stream of income from a real estate asset.[13] It is important to note that due to the mathematical method of the calculation of cap rates, a lower cap rate indicates higher valuation. Based on an analysis of data provided by Cushman and Wakefield, the average office cap rate in WalkUPs was 4.6 percent, versus 6.5 percent for offices in Edge Cities, a 41 percent WalkUP cap rate premium.[14] **By combining both the rent and the cap rate premiums, the value premium for office space in WalkUPs is 150 percent over Edge Cities.** Due to a widening spread in cap rates between WalkUPs and Edge Cities, as well as stronger rent growth in WalkUPs, this valuation premium has grown since 2007, when it was 100 percent.[15]
- **Office rents in Walkable Neighborhoods at $18.59 per square foot are actually three percent lower than in Drivable Sub-divisions.** There is currently no value premium for offices located in Walkable Neighborhoods as compared to Drivable Sub-divisions. Office rents in these local-serving locations tends to be among the lowest in the metro area due to the tenants served.

RETAIL

- **Retail rents in WalkUPs are approximately 23 percent higher than in Edge Cities, up from near parity in 2007.** Based on an analysis of data provided by Cushman and Wakefield, we estimate that average cap rates in WalkUPs are 4.3 percent versus 6.5 percent for Edge Cities and Sub-divisions. **The combination of lower cap rates and higher rents in WalkUPs translates into a total value premium of 85 percent over Edge Cities**.
- **Retail rents in Walkable Neighborhoods average $17.44, very similar to the average for Drivable Sub-divisions.** We did not have sufficient data to estimate cap rates for Walkable Neighborhoods but they are likely to be similar to drivable areas. The result is that retail values in Walkable Neighborhoods and Drivable Sub-divisions are about equal.

RENTAL APARTMENTS

- **Average rental apartment rents per square foot are 52 percent higher in WalkUPs than in Edge Cities.** Based on data provided by Cushman and Wakefield, we estimate that the average cap rate for WalkUP apartments is 4.5 percent versus 5.3 percent for Edge Cities and Sub-divisions. Combining this cap rate premium and the higher rents results in an overall value premium of 78 percent for apartments in WalkUPs relative to Edge Cities.
- **Average monthly apartment rents in Walkable Neighborhoods are estimated to be $1.85 per square foot, slightly higher than the $1.72 for Drivable Sub-divisions.** The data was insufficient to determine any difference in cap rates between Walkable Neighborhoods and Drivable Sub-divisions and we suspect that there is little difference at this time. As a result, multifamily rental apartments in Walkable Neighborhoods have likely only a small value premium of approximately eight percent over those in Drivable Sub-divisions.

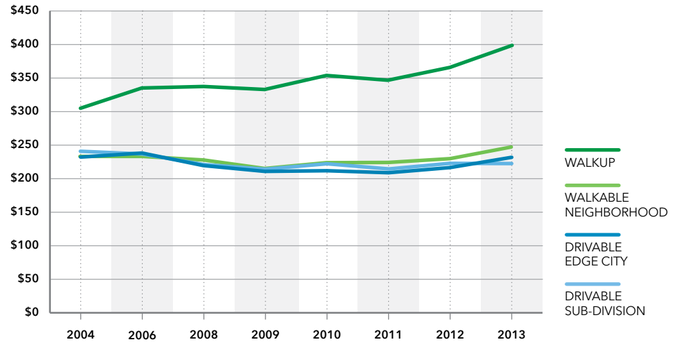
HOTELS

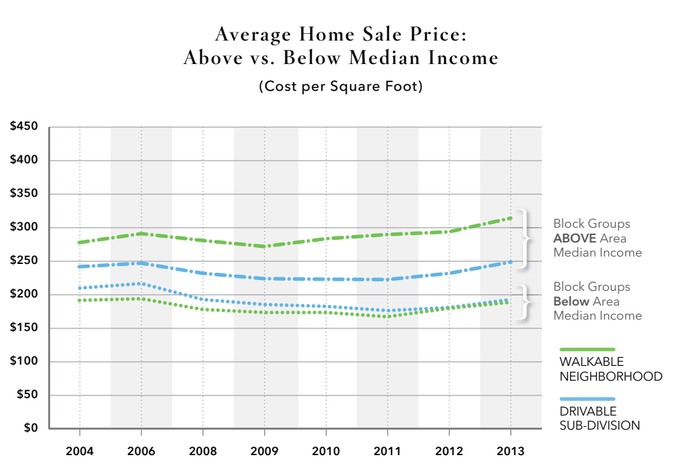
- **For hotels, the average REVPAR (revenue per available room) in WalkUPs is 81 percent higher than in Edge Cities,** with the caveat that this estimate is based on a limited sample of hotels in a few selected WalkUPs and Edge Cities where data was available. Specific cap rate data was unavailable but the spread between Central Business District and Suburban hotels is probably indicative of the difference between WalkUPs and Edge Cities. It ranges from 0.75 percent for "select service" hotels to 2.5 percent for "full-service" hotels.[16] If we assume an average cap rate premium of 1.5 percent for WalkUPs, the total WalkUP value premium is 120 percent.[17]

FOR-SALE RESIDENTIAL

- **The trend in for-sale housing prices has been remarkable.** Home prices in WalkUPs, and to a lesser extent, Walkable Neighborhoods, weathered the recession much better than Edge Cities and Sub-divisions. As of 2013, the latest year data was available, per square foot home prices in Edge Cities and WalkUPs had recovered from the recession to the point where they were about the same as they were in 2004, in nominal dollars. In WalkUPs, however, home prices in 2013 were 31 percent higher than in 2004. **This has resulted in a price per square foot premium of 80 percent for WalkUPs over Edge Cities.**[18]
- **Prices in Walkable Neighborhoods tracked Drivable Sub-divisions very closely until 2010, when a slight premium emerged. As of 2013, per square foot home prices in Walkable Neighborhoods were seven percent higher than in Drivable Sub-divisions.** However, if neighborhoods of similar incomes are compared, the premium becomes more apparent. Looking only at lower income places (block groups where the median income is below the regional median of $79,000), the average price per square foot in Walkable Neighborhoods in 2004 was 10 percent lower than Drivable Sub-divisions. By 2013, that discount had melted to virtually nothing because prices in lower income Walkable Neighborhoods rose faster than in Drivable Sub-divisions, (although prices for both are still off their peak of 2006).

  Comparing neighborhoods with median incomes higher than $79,000 shows a similar trend although the starting point is different. Higher-income Walkable Neighborhoods started with a 15 percent premium over Drivable Sub-divisions in 2004 and this premium grew to 26 percent by 2013.





Land Use in *Metro Boston*

WALKUP TRENDS

Market Shifts Over Three Real Estate Cycles

The market shifts of the past 30 years demonstrate a general trend toward walkable urban development, although each product type is different. Some are leading the trend toward more walkable urban development, some are laggards, and some are in between.

The late 20th century saw walkable urban real estate product types lose market share as drivable sub-urban development was in ascent. For example, during this period walkable urban office absorption in nearly every metropolitan area would have had to double just to maintain market share. These declining market shares reflected the nationwide disinvestment in American center cities—the locations of most walkable urban places in the 20th century.

The last 30 years, however, have seen a shift back toward walkable urban development. In Metro Boston, there are three categories of real estate products relevant to this walkable urban trend.

1

LEADERS:
HOTEL & OFFICE

- Both products have increased their market share in the most recent real estate cycles.
- **Hotel** is the product in Metro Boston that has shifted most aggressively to walkable urban development. Of the hotel inventory located in regionally significant places in 1991, 46 percent was in WalkUPs, 54 percent was in Edge Cities. During the 1990s cycle, Edge City hotels expanded their market share (61 percent of the new hotel growth in the cycle) over WalkUPs. In the 2000s cycle the trend lines reversed with WalkUP hotel absorption being three times that of Edge City hotel absorption. During the current cycle that started in 2009, the WalkUP hotel market has grown even faster, at 4.5 times the rate of Edge Cities.
- **Office** is also a leading walkable urban product. In the 1990s cycle, WalkUP office absorption would have had to double just to maintain market share. In both the 2000s and the current cycle, office absorption has been evenly split between WalkUPs and Edge Cities. The high valuation premium for office space in WalkUPs, 150 percent over Edge Cities, demonstrates the pent-up demand for more walkable urban office space.

2

TRANSITIONAL:
RENTAL APARTMENTS

- **Rental Apartments** is the product type that seems to be in transition from drivable to walkable urban. From 1992-2000, 50 percent of new apartment development was located in either WalkUPs or Walkable Neighborhoods. From 2001-2008, walkable areas' share fell to 41 percent but since 2009, it has risen once again to 50 percent. We anticipate that walkable Boston will continue to grow its market share of new apartment development in the next cycle, and establish a clearer trend. It is significant that for the first time in decades, multi-family permits (both for-sale and rental since this data has always been combined) are now greater than for-sale residential in this cycle. This may be a reflection of homeownership rapidly dropping. It fell from 69 percent of total households in 2005 to 64 percent in 2014 and shows no signs of leveling off. Households in well-known walkable urban places, such as Manhattan, Paris and London, have a much higher propensity to rent; generally 60-70 percent are renters. Possibly there is a structural shift toward rental apartments as Metro Boston builds more walkable urban places, a hypothesis that should be studied in the future. MAPC projections through 2040 indicates increased rental apartment demand.[19]

3

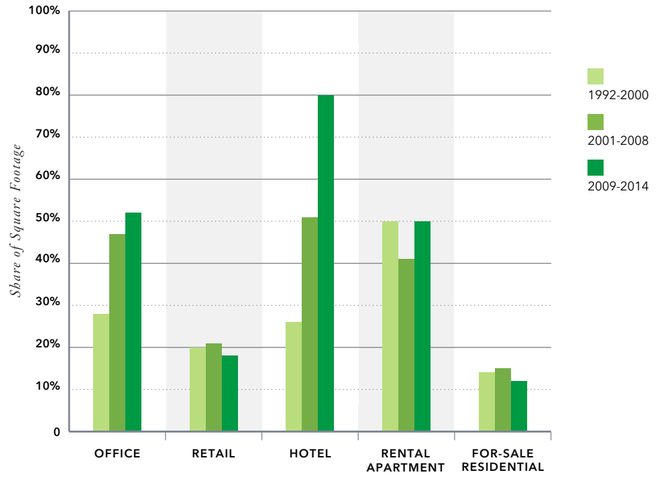
LAGGARDS:
RETAIL & FOR-SALE RESIDENTIAL

- The lagging product types that continue to absorb more drivable sub-urban development include **Retail** and **For-Sale Residential**. Both types of product developers continue to embrace the drivable sub-urban model of the last century that requires the extensive consumption of land for sub-divisions and one-story shopping centers surrounded by acres of surface parking. This lag may be due to the valuation premiums, that while significant (41 percent for retail and 20 percent for for-sale residential, as mentioned above), are not sufficient for some developers to change their business model.
- The issue is that business as usual may no longer be viable in the future, particularly for homebuilders. In 2014, the fifth year of this cycle and possibly at its peak, slightly less than 5,000 single-family for-sale permits were issued in the Boston metro area. Although this represents a recovery from all-time low levels of 2008 and 2009, it is still lower than the permit issuance in any year from 1980-2007. This possible peak year for permits in this cycle is even lower than the recessionary low in 1989. In the most recent cycle, single-family units have accounted for a minority of housing permits, 47 percent, versus 53 percent for multi-family. This may become the first real estate cycle since at least 1980, when this data first became available, where multifamily permits outnumbered single-family. Compare that to 1992-2000, when single-family units accounted for 84 percent of permits. There are many factors affecting the homebuilding industry's weak recovery. However, given the huge and growing price premiums in walkable places and stagnant prices in drivable locations, one hypothesis is that homebuilders are simply not building the right products in the right places that are attractive to a large and growing portion of the market.

The Last Three Real Estate Cycles:

Share of Metro Income Property Square Footage Developed in WalkUPs & Walkable Neighborhoods[20]

Income Property = Office, Retail, Hotel, Rental Apartment, For-Sale Residential



Walkable Urbanism & Economic Development

Correlations and findings indicate that across the largest 30 U.S. metropolitan areas, walkable urban development, education, and economic vitality are linked...somehow. This correlation appears to be true for Boston.

The hypothesis many economic development professionals and many business people subscribe to is that the U.S. has been layering a "knowledge economy" over the 20th-century industrial base. Backed by considerable research, the education of the work force—best defined as the percentage of the work force over age 25 with a college degree—is key to the economic success of a business, a metropolitan area, and ultimately the country.

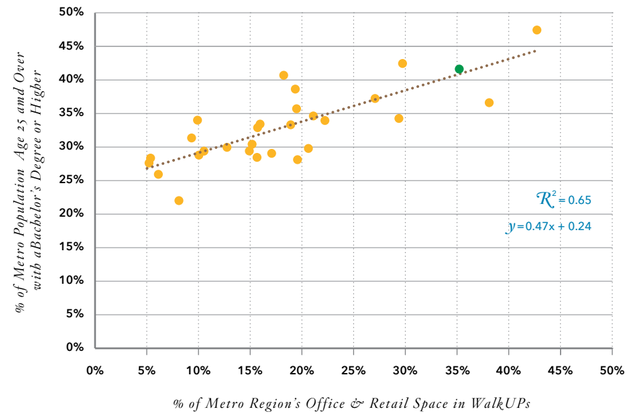
The Milken institute, in its paper entitled *A Matter of Degrees*, found that adding one year to the average year of schooling is associated with an increase in real GDP per capita of 10.5 percent and an increase in real wages per worker of 8.4 percent, even after controlling for many other variables.[21] As Edward Glaeser, a professor of economics at Harvard University stated, "The most successful economic development policy is to attract and retain smart people and then get out of their way."[22]

The connection between the educated work force and walkable urbanism has been best made by Richard Florida, director of the Martin Prosperity Center at the University of Toronto School of Management and originator of the concept of the "creative class." As Florida says in *The Rise of the Creative Class Revisited*, "the Creative Class is ... the key force that is shaping our geography, spearheading the movement back from outlying areas to urban centers and close-in walkable suburbs."[23] The City Observatory, a think tank focused on cities, confirmed this general trend in a recent report, which found that 25-34 year olds with college degrees are migrating disproportionately towards close-in urban neighborhoods.

Our own survey of the largest 30 metropolitan areas, *Foot Traffic Ahead*,[24] found per capita GDP was strongly correlated to walkable urbanism, as measured by the percentage of the region's office and retail space in WalkUPs and educational attainment, as measured by the percentage of people over 25 with college degrees. These correlations are illustrated in the charts on pages 30 and 31. Of the 30 metro areas surveyed, Boston had the third-highest amount of walkable urbanism, the third-highest educational attainment, and ranked seventh in per capita GDP.

Walkable Urbanism, Higher Education & Metropolitan GDP in the Top 30 U.S. Metros

Correlation:
Educational Attainment & Walkability



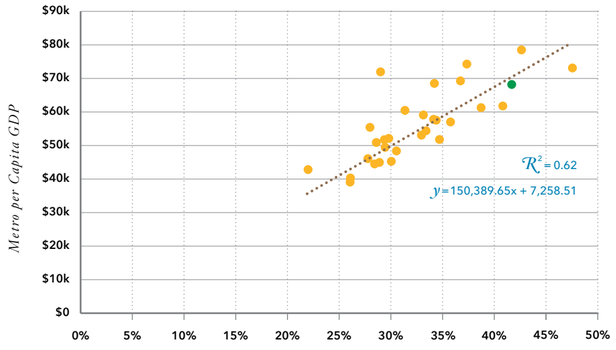
METROPOLITAN BOSTON
U.S. TOP 30 METROS

Since 2000, Boston's walkable urban places, which constitute just 5.4 percent of metro area land, have attracted nearly 70 percent of Metro Boston's growth in young, college-educated people.

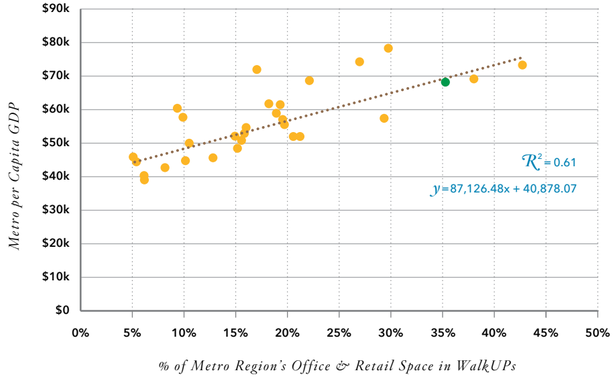
These correlations do not prove causation and in fact, causation may run both ways among these variables. For example, metro areas with high per capita GDPs may attract more educated people, who then demand walkable places, just as walkable places may attract educated people, which then increase GDP per capita. Also, there may well be additional variables driving the relationship. All of this warrants further research.

Nonetheless, the ranks of the young and educated seem particularly drawn to Boston's walkable urban places. Since 2000, the Boston metropolitan area has added approximately 52,000 people under the age of 34 with college degrees. We estimate that 41 percent of this population has chosen to locate in a WalkUP and a further 28 percent in Walkable Neighborhoods (as reported above, only 5.4 percent of the metro area is walkable urban). This means that walkable urban places, where 39 percent of all people live, have attracted nearly 70 percent of the growth in young, educated people in the Boston metro area.[25]

Correlation:
Educational Attainment & GDP Per Capita
(2013 per capita GDP, chained 2009 dollars)



Correlation:
Walkability & GDP Per Capita
(2013 per capita GDP, chained 2009 dollars)



WALKUP RANKINGS

COPPER

SILVER

GOLD

PLATINUM

The charts at the right show the average rents and assessed values per acre for each Metropolitan Boston's WalkUPs at each Economic Ranking level.

The charts also show the overall averages for Metro Boston's Edge Cities as a point of comparison.

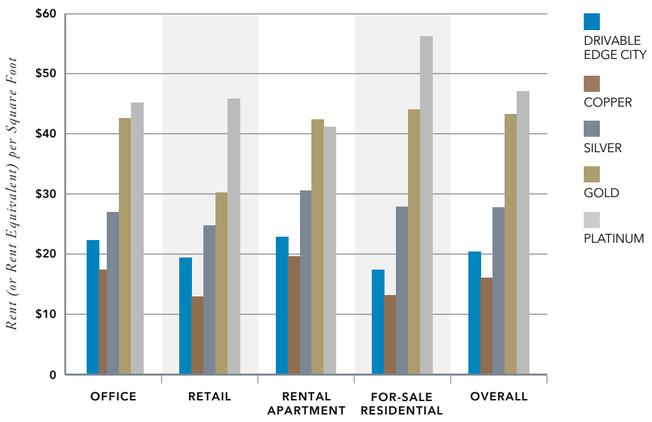
Economic Rankings

WalkUPs in Metropolitan Boston fall into four levels when measured by economic performance. Each WalkUP level has different growth and investment potential.

Economic rankings for WalkUPs are based on the rents per square foot achieved for four product types: office, retail, rental apartments, and for-sale housing (translated into a rent per square foot equivalent), and the total assessed value. Each WalkUP's average rent per square foot was determined and weighted according to the percentage of square feet by product type. The assumption is that the amount the market is willing and able to pay in terms of rent and value is a proxy for that WalkUP's economic performance. It is also a crucial metric for real estate investors and developers trying to understand where the WalkUP stands on the risk-reward curve.

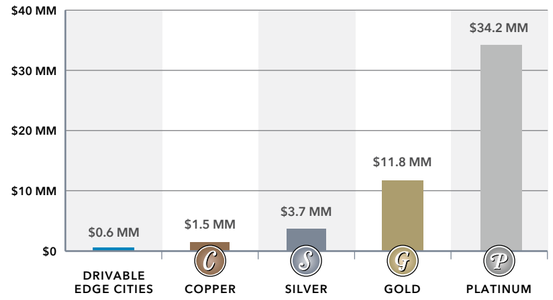
The average weighted rents per square foot range from $10.44 to $52.28 in Boston's WalkUPs and the assessed value per acre ranges from $745,000 to $60 million. A metal rankings system for WalkUPs that ranks each metric equally has been determined, Platinum is the highest, while Gold is the second highest and considered to be a place that has attained "critical mass."[26] Silver is the third highest and Copper is the lowest.

Average Rents by Product Type



Assessed Values per Acre

($ Millions)



COPPER

Attleboro
Brockton
Downtown Fall River
Downtown Gloucester
Downtown New Bedford
Downtown Peabody
Downtown Salem
Downtown Worcester
Downtown Beverly
Dudley Square
Fitchburg
Framingham
Haverhill
Lawrence
Lowell
Lynn/Central Square
Marlborough
North New Bedford/ Acushnet Ave.
Norwood
Plymouth
Taunton BID
Wakefield

Average Key Metrics

Walk Score: 83

Intersection Density: 132

Gross FAR: 0.56
(Floor Area Ratio)

Assessed Value per Acre:

$1.49 million

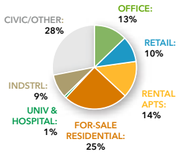
Annual Rent per Sq. Ft. {$ = $5}

OFFICE: $17.48
RETAIL: $12.95
RENTAL APARTMENTS: $19.75
OVERALL AVERAGE: $16.17

Housing per Sq. Ft. {$ = $10}

FOR-SALE RESIDENTIAL: $149.00

Square Footage Breakdown by Use:



CHARACTERISTICS

The lowest level of economic performance, Copper WalkUPs in Boston primarily consist of Regional Urban Centers that initially developed during the industrial revolution in the 19th century. Many of them are still coping with the steady erosion of manufacturing as a source of employment, which has characterized the U.S. economy for the last several decades. In some cases, there were misguided attempts in the 1970s at urban renewal, which left unsightly scars and damaged the urban fabric. With the exception of Dudley Square, all Copper WalkUPs are located beyond the Inner Core of the Boston metropolitan area (outside Route 128). Their physical distance from Boston's Inner Core, the epicenter of the metro area's current knowledge economy, has also limited spillover walkable urban development thus far.

Compared to Edge Cities, average rents in Copper WalkUPs are lower for all of the evaluated product types. On a weighted average basis, Copper WalkUP rents are about 74 percent of the average for Edge Cities. Despite lower rents, the assessed value per acre of these WalkUPs is still much higher than for Edge Cities, because of their greater density.

OBSERVATIONS

Many of these places have strong potential for future economic growth. As WalkUPs in the Inner Core become increasingly expensive, both for residents and businesses, the relative affordability of these places will only increase. That should eventually bring new development and demand to these places, especially for those with commuter rail service, such as Brockton and Wakefield, and/or those in the "favored quarter," such as Framingham. The favored quarter[27] in Metro Boston generally extends to the west.

In addition, many of the Copper-ranked WalkUPs have inherited a street network devised before the rise of the automobile, meaning they have the appropriate "bones" for future walkable urban development. Given the costs of retroactively building such a network, this is not an insignificant asset. Unfortunately, some of these WalkUPs do not have appropriate zoning for what the market wants, generally not allowing sufficient density for new development and economic growth to emerge.

The Hamilton Canal District in Lowell, Mass, provides evidence of the potential for these places. The plan calls for the redevelopment of a declining industrial district into a mixed-use, transit-oriented development that will include 400,000 square feet of commercial space and the addition of more than 700 new housing units, many affordable. Implementation is already underway.

SILVER

Allston
Arlington
Charlestown
Downtown Quincy
Fields Corner
Lower Allston
Malden Center
Mission Hill
Newburyport
North Dorchester
Porter Square/
Davis Square
Roxbury
Tufts
Waltham
Watertown
Woburn

Average Key Metrics

Walk Score: 80

Intersection Density: 173

Gross FAR: 0.65
(Floor Area Ratio)

Assessed Value per Acre:

$3.71 million

Annual Rent per Sq. Ft.
{$ = $5}

OFFICE: $27.03

RETAIL: $24.81

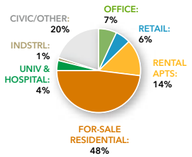
RENTAL APARTMENTS: $30.69

OVERALL AVERAGE: $27.82

Housing per Sq. Ft. {$ = $10}

FOR-SALE RESIDENTIAL: $384.00

Square Footage Breakdown by Use:



CHARACTERISTICS

The WalkUPs ranking in the Silver category are a diverse set and are all located inside Route 128, with the exception of Newburyport. Silver WalkUPs have not yet achieved "critical mass," defined as not requiring government assistance or subsidy for new development. However, they have a trajectory that suggests they will continue to develop into higher-performing walkable urban places.

Silver WalkUPs have rents that are 72 percent higher, on average, than Copper WalkUPs and 36 percent higher than Edge Cities. The greatest difference is in the price of for-sale residential (and therefore its estimated rental value), which is more than double that of Copper WalkUPs. Silver WalkUPs' average Walk Score is slightly lower at 80 than that of Copper WalkUPs (83), but both the average FAR and average intersection density are higher than Copper WalkUPs. The average assessed value per acre of $3.7 million is 150 percent higher than Copper WalkUPs and 6.6 times higher than Edge Cities.

OBSERVATIONS

Silver WalkUPs have the greatest value creation potential for investors and developers. They may still have an image as being economically risky, which is reflected in their high capitalization rates and lower valuations, as compared to the Gold and Platinum WalkUPs. These places are likely to be improved by more development and place management. In time, WalkUPs that are ranked as Silver will yield the greatest relative financial return of any of the ranked WalkUPs.

GOLD

Cambridgeport
Central Cambridge
Chinatown
Coolidge Corner
East Cambridge
Harvard Square
Kenmore/Fenway
Longwood Medical Area
Northeastern
North End
Seaport
South End
West End

Average Key Metrics

Walk Score: 89

Intersection Density: 299

Gross FAR: 1.05
(Floor Area Ratio)

Assessed Value per Acre:

$11.76 million

Annual Rent per Sq. Ft.
{$ = $5}

OFFICE: $42.67

RETAIL: $30.32

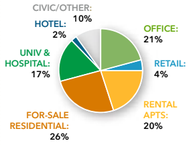
RENTAL APARTMENTS: $42.45

OVERALL AVERAGE: $43.41

Housing per Sq. Ft. {$ = $10}

FOR-SALE RESIDENTIAL: $670.00

Square Footage Breakdown by Use:



CHARACTERISTICS

Gold WalkUPs have achieved critical mass; there is a "there there." Investors recognize this by lower capitalization rates (increases valuations). Land prices are at a premium, reflecting the higher rents and sale per-square-foot prices that have been achieved. Overall rents in Gold WalkUPs are 56 percent higher than in Silver WalkUPs and 112 percent higher than in Edge Cities. Even when compared to the five highest-performing Edge Cities, which have weighted-average rents of approximately $30, Gold WalkUPs maintain a premium of 45 percent.

OBSERVATIONS

Developers are attracted to Gold WalkUPs since the market risk is lower and they are relatively assured of "exit strategies" for selling stabilized projects to institutional investors. However, given the high land prices, there is a smaller upside for investment returns. Institutional investors are more attracted to Gold WalkUPs because there is some upside remaining in asset pricing (moving to Platinum), but low risk.

PLATINUM

Back Bay
Beacon Hill
Downtown BID
Financial District (Boston)
MIT/Kendall Square

Average Key Metrics

Walk Score: 91

Intersection Density: 344

Gross FAR: 2.20
(Floor Area Ratio)

Assessed Value per Acre:

$34.2 million

Annual Rent per Sq. Ft. {$ = $5}

OFFICE:	
$$$$$$$$$	$45.24
RETAIL:	
$$$$$$$$$	$45.91
RENTAL APARTMENTS:	
$$$$$$$$$	$41.26
OVERALL AVERAGE:	
$$$$$$$$$	$47.21

Housing per Sq. Ft. {$ = $10}

FOR-SALE RESIDENTIAL:	
$$$$$$$$$$	$794.00
$$$$$$$$$$	
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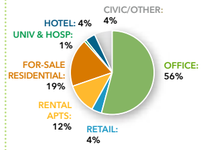
Square Footage Breakdown by Use:



CHARACTERISTICS

Only five of the 57 WalkUPs identified in Metropolitan Boston are ranked as Platinum. All are located either in Downtown or nearby. Platinum WalkUPs are predominantly where large institutional owners, such as insurance companies, pension funds, sovereign wealth funds, and REITs, have chosen to invest, resulting in the lowest capitalization rates and the highest valuations and land prices in the metropolitan area.

Platinum WalkUPs have average overall rents of $47.21 per square foot, nine percent higher than the average for Gold WalkUPs and 130 percent higher than for Edge Cities. When compared to the five highest performing Edge Cities, Platinum WalkUP rents are 57 percent higher. The average assessed value per acre is $34.2 million—23 times higher than Copper WalkUPs and 61 times higher than the average for Edge Cities.

OBSERVATIONS

Institutional investors hold Platinum WalkUP assets over the long term. Due to the limited number of Platinum WalkUPs and assets within them, owners do not tend to sell these assets very often. There also is anecdotal evidence that over the past decade investors have increased their hold time of these assets, much to the chagrin of mortgage and investment bankers who make their living trading properties. If this becomes the norm, it would reverse the late 20th-century trend of institutional investors holding assets for shorter time periods. For example, many insurance companies cut their average asset hold of about 10 years in half during the 1990s. This would prove the theory that walkable urban assets improve as critical mass is achieved and more urban vitality is built in a WalkUP. There is no reason to sell if the best investment in real estate is a vital walkable urban place. Owners achieve an "upward spiral" of value creation just by maintaining their property, propelled by other neighboring investors in the WalkUP.

COPPER

SILVER

GOLD

PLATINUM

Social Equity Rankings

WalkUPs fall into the same four levels as the economic rankings, although driven by entirely different variables: Accessibility, Opportunity, and Affordability.

While economic performance is obviously the principal objective of real estate, public policy must take into account a variety of other concerns, and increasingly prominent among those is the issue of social equity. From federal agencies to municipal governments and community-based organizations, there is a growing interest in ensuring that public policies and private investments are oriented so as to improve economic opportunity for the disadvantaged; reduce disparate burdens on low-income, minority, and immigrants; and minimize displacement from areas experiencing reinvestment.

To better understand the social equity dimensions of the WalkUPs that have been defined, the research team developed social equity rankings that characterize the extent to which low-income and minority residents can benefit from housing and economic opportunities in those places—and the extent to which existing residents might be affected by escalating rents and sale prices.

Metrics Used to Determine Social Equity

In examining social equity, we looked at nationally available measures of accessibility, opportunity and affordability. The final six measures (four in accessibility/opportunity and two in affordability) selected include the following:

ACCESSIBILITY (1/3 of Social Equity ranking)

- **Transit Accessibility**
  Proportion of the region's working-age population that can access the WalkUP by transit within 45 minutes, a measure created by the EPA and available in the Smart Location Database. This measure takes into account actual travel times by transit during the PM peak hours, and includes walking, waiting, in-vehicle travel and transfer times. Accessibility by transit is an important measure of access to the WalkUP for residents of the region, especially in WalkUPs close to the Boston/Cambridge/Somerville area, where driving can be prohibitively expensive and inconvenient.

- **ABC Commuting Accessibility**
  Proportion of the WalkUP's residents that commute by non-car modes (i.e. Transit, Biking, Walking),a measure available in the American Community Survey. This measure reports actual commuting behavior; the presence of transit alone does not necessarily reflect its actual use. In general, if people can and do reach their jobs by non-car modes, the WalkUP is considered more accessible than one where transit is available but not well utilized.

OPPORTUNITY (1/3 of Social Equity ranking)

- **Job Density**
  Calculated as a WalkUP's average number of jobs per acre. For this report, the number of jobs is approximated from the InfoUSA 2011 database due to the lack of availability of the commonly used Longitudinal Employer-Household Dynamics (LEHD) survey in Massachusetts. This measure is included as an opportunity for employment in the WalkUP.

- **School Reading Proficiency**
  Percent of test takers in the WalkUP's elementary and elementary/middle schools that score at least proficient in reading, calculated using Massachusetts Comprehensive Assessment System data. This measure is included as an opportunity for quality schools for resident families.

AFFORDABILITY (1/3 of Social Equity ranking)

- **Location Affordability Index**
  Housing and transportation costs as a percentage of area median income, a measure developed by HUD. Since housing and transportation costs are generally linked, especially if the household has to "drive till you qualify," exchanging lower housing costs for higher transportation costs, this measure combines the overall expenses paid by the WalkUP's residents on both of these living expense categories.

- **Housing Cost Burden**
  Proportion of households under 100% Area Median Income that are severely housing cost-burdened (50%+ of income spent on housing), a measure we calculated using data provided by HUD as part of the Comprehensive Housing Affordability Strategy (CHAS) dataset. This measure provides the level of cost burden that comes specifically from housing. It is included both to provide an alternative source of housing costs and to reflect the reality that housing costs alone can frequently be crippling for residents whose income is less than the Area Median Income.

Our Social Equity rankings are based on two components: Accessibility/Opportunity and Affordability. A WalkUP ranks high on accessibility/opportunity if it is easy to reach for a large share of the region's population and accessible by non-driving modes, and if it provides opportunities for jobs and good schools. A WalkUP ranks high on affordability if it is not severely cost-burdened by housing and transportation costs.

On these measures, WalkUPs tend to be more accessible, and have higher work opportunities than the rest of the region. The cost of that opportunity seems to vary depending on the data source and methodology. While HUD's Location Affordability Index indicates that average housing and transportation costs are both lower in WalkUPs than in Edge Cities and Sub-divisions, the proportion of households earning less than Area Median Income with severe housing cost burdens is clearly higher in WalkUPs than anywhere else. The ranking incorporates both measures and the result is that WalkUPs tend to have significantly more accessibility and opportunity than Edge Cities or Sub-divisions but are less affordable. Walkable Neighborhoods tend to be both more affordable and offer slightly more opportunity than either Edge Cities or Sub-divisions. However, as with economic rankings, the summary is hiding a lot of variation in social equity within each category.

The accessibility and opportunity measures are correlated with each other; generally, WalkUPs that are accessible also have higher opportunity and those that are less accessible have lower levels of opportunity. Therefore, they are combined into one scale of accessibility/opportunity. The affordability measure is also correlated with accessibility and opportunity, but in opposite directions (places with high affordability tend to be inaccessible and vice versa), reflecting a different dimension of social equity. The measures within accessibility, opportunity, and affordability are weighted equally.

The scatterplot on pages 40 and 41 shows the tradeoffs between affordability and accessibility/opportunity; WalkUPs in the Inner Core, like the Downtown and Financial District are accessible but not affordable. In contrast, WalkUPs on the outer edges of the commuter rail system, like Worcester, New Bedford, and Fall River, are affordable but difficult to acces.

The WalkUPs that provide some combination of affordability, accessibility, and good work and school opportunities are ranked as Platinum on the social equity scale. Those that are relatively unaffordable, not easily accessible, or do not provide good opportunities are ranked Copper. The rest are ranked either Silver or Gold, depending on their levels; however, a WalkUP will not rank as Gold or Platinum if it scores Copper in either of the two component measures. For instance, a WalkUP with an extremely high accessibility/opportunity score, like the Financial District, cannot overcome its Copper affordability score, and ends up being scored a Silver. Conversely, if a WalkUP scores a Platinum on either measure, it is ranked at least at Silver.

As rankings go from Copper to Platinum, for example, the transit coverage (percent of region's population accessible to the WalkUP within 45 minutes by transit) goes up from four percent to 18 percent. This reflects the easier access to the WalkUP from the rest of the region due to higher quality and frequency of transit. At the same time, however, the housing cost burden (percent of low income households that spend at least 50 percent of income on housing) does not decrease substantially until Platinum levels. Even then it remains quite high, reflecting the conflict between affordability and access.

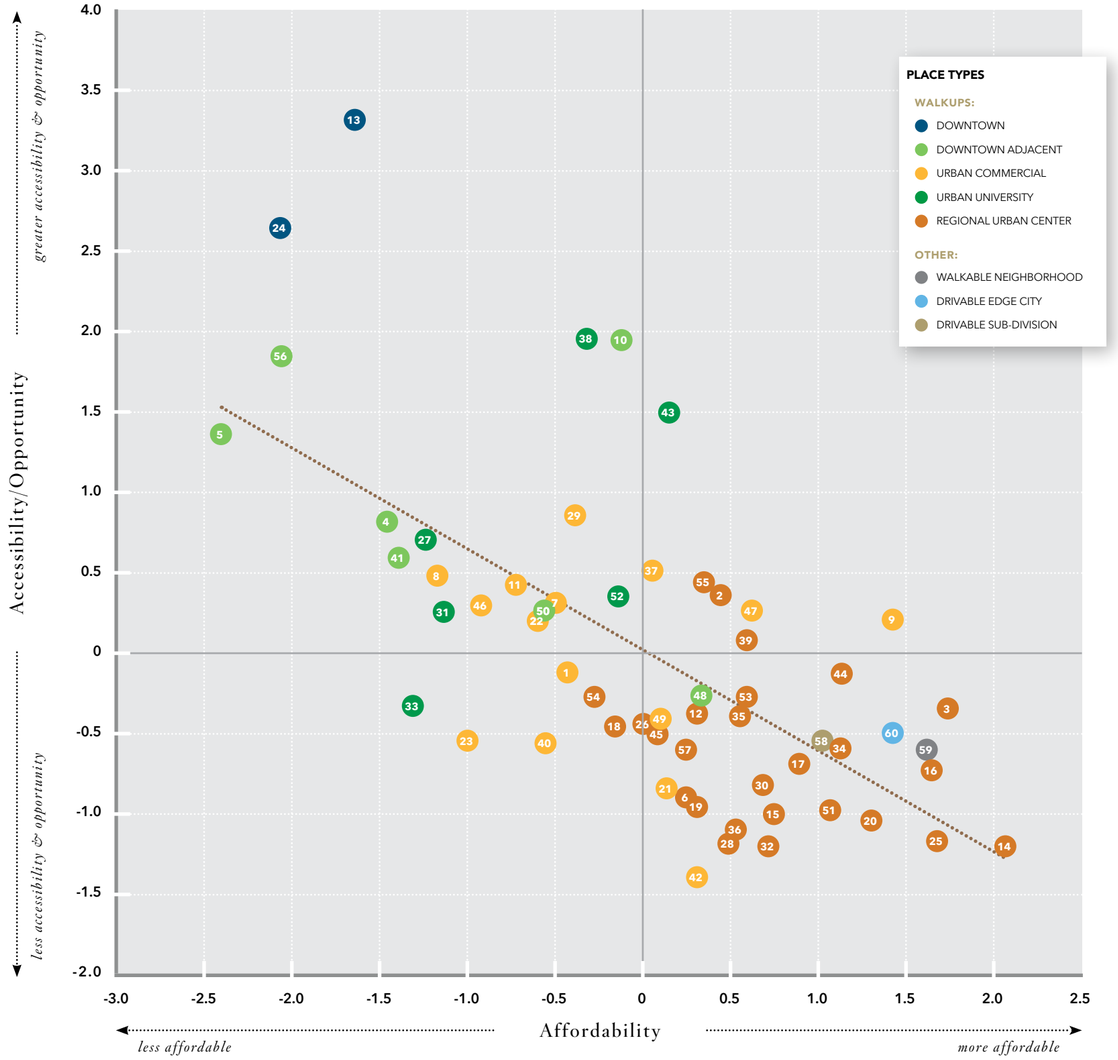
WalkUPs as a group pay a large premium in housing costs at all levels. The combination of affordability and accessibility/opportunity despite the inherent tradeoffs make the Gold and Platinum WalkUPs more socially equitable than the Copper and Silver ones. Unfortunately, many WalkUPs that rank high on the Economic scale fall into the lower ranks of the Social Equity scale and vice versa.

ID#	WALKUPS
1	Allston
2	Arlington
3	Attleboro
4	Back Bay
5	Beacon Hill
6	Brockton
7	Cambridgeport
8	Central Cambridge
9	Charlestown
10	Chinatown
11	Coolidge Corner
12	Downtown Beverly
13	Downtown BID
14	Downtown Fall River
15	Downtown Gloucester
16	Downtown New Bedford
17	Downtown Peabody
18	Downtown Quincy
19	Downtown Salem
20	Downtown Worcester
21	Dudley Square
22	East Cambridge
23	Fields Corner
24	Financial District (Boston)
25	Fitchburg
26	Framingham
27	Harvard Square
28	Haverhill
29	Kenmore/Fenway
30	Lawrence
31	Longwood Medical Area
32	Lowell
33	Lower Allston
34	Lynn/Central Square
35	Malden Center
36	Marlborough
37	Mission Hill
38	MIT/Kendall Square
39	Newburyport
40	North Dorchester
41	North End
42	North New Bedford/Acushnet Ave.
43	Northeastern
44	Norwood
45	Plymouth
46	Porter Square/Davis Square
47	Roxbury
48	Seaport
49	South Boston
50	South End
51	Taunton BID
52	Tufts
53	Wakefield
54	Waltham
55	Watertown
56	West End
57	Woburn
58	Drivable Sub-division
59	Walkable Neighborhood
60	Drivable Edge Cities

Scatterplot Showing Distribution of

Accessibility/Opportunity vs. Affordability

of Metropolitan Boston's Regionally Significant WalkUPs



COPPER

Brockton
Downtown Gloucester
Downtown Salem
Dudley Square
Haverhill
Lawrence
Lowell
Lower Allston
Marlborough
North New Bedford/ Acushnet Ave.

Average Key Metrics

Housing & Transportation Costs:
(As a % of median income for Metropolitan Boston)

Housing Cost Burden: 48%
(% of low income households that spend at least 50% of income on housing)

Job Density: 13 per acre

School Quality: 43%
(% of students with proficient or higher reading level)

Transit Accessibility: 4%
(Share of population that can access the WalkUP by transit within 45 minutes)

ABC Commuting: 24%
(Non-car mode commutes)

Of the 57 WalkUPs in the Boston area, 10 score a Copper on the social equity scale. Copper-ranked WalkUPs are primarily located outside of the Inner Core of the Boston metropolitan area (with the exception of Dudley Square and Lower Allston). They are mostly served only by commuter rail and/or regional transit service and have relatively few job opportunities. However, almost all are in fact affordable for their residents. Since affordability accounts for one-third of the final score, a Gold ranking in that category is insufficient to overcome the Copper ranking in the measures of accessibility/opportunity. This categorization reflects the reality that affordable living conditions without access to higher opportunity areas is inequitable.

In addition, the average unemployment rate in Copper WalkUPs is 17 percent, an extremely high level for the region, which further supports the low opportunity assessment. Similarly, the low level of affordability (due to the high cost of housing relative to income) is exacerbated by a lack of subsidized housing. On average, just over one percent of the units in these WalkUPs are subsidized.

No WalkUPs have Copper rankings in both accessibility/opportunity and affordability. Most rank as Gold in affordability, so most WalkUPs in this region would be best served by addressing their transit quality and opportunity metrics while striving to maintain affordability.

WalkUP *Rankings*

SILVER

Allston
Back Bay
Beacon Hill
Downtown Beverly
Downtown BID
Downtown Fall River
Downtown New Bedford
Downtown Peabody
Downtown Quincy
Downtown Worcester
Fields Corner
Financial District (Boston)
Fitchburg
Framingham
Harvard Square
Malden Center
North Dorchester
North End
Plymouth
Seaport
South Boston
Taunton BID
Wakefield
Waltham
West End
Woburn

Average Key Metrics

Housing & Transportation Costs:
(As a % of median income for Metropolitan Boston)

Housing Cost Burden: 48%
(% of low income households that spend at least 50% of income on housing)

Job Density: 65 per acre

School Quality: 51%
(% of students with proficient or higher reading level)

Transit Accessibility: 12%
(Share of population that can access the WalkUP by transit within 45 minutes)

ABC Commuting: 38%
(Non-car mode commutes)

The 26 Silver-ranked WalkUPs are a diverse set, largely due to the rule that a Copper ranking in either affordability or accessibility/opportunity disqualifies a WalkUP from achieving a Gold or Platinum ranking. There are several balanced WalkUPs, like Allston, Fields Corner, and Dorchester, with Silver rankings in both sub-categories. But the majority of these WalkUPs show a large discrepancy between affordability and accessibility/opportunity. This discrepancy, especially in places like Beacon Hill and Downtown BID, which are among the least affordable but the most accessible, show the tradeoff that frequently exists between accessibility and livability. The places with the highest access and opportunity demand a higher cost premium.

Conversely, affordable places like Taunton and Fitchburg are very difficult to get to because they are frequently on the outer reaches of the commuter rail system. They provide an affordable living situation, but little opportunity within the WalkUP and low access to other WalkUPs in the region.

The averages on the metrics for the Silver WalkUPs are hiding important differences between the three types of WalkUPs in this category: (1) balanced WalkUPs, (2) affordable-but-inaccessible WalkUPs, and (3) accessible-but-unaffordable WalkUPs. In order to improve their social equity ranking, these WalkUPs need to address their specific deficiencies.

In addition, the unemployment rate in the Silver WalkUPs averages 10 percent, a strong improvement over Copper. But once again, similar to the job density measure, this average does not reflect the wide range of unemployment rates within this category.

GOLD

Attleboro
Cambridgeport
Central Cambridge
Coolidge Corner
East Cambridge
Kenmore/Fenway
Longwood Medical Area
Lynn/Central Square
Norwood
Porter Square/Davis Square
South End

The 11 Gold WalkUPs reflect a much-improved state of social equity in that they have at least a Silver rating in both affordability and accessibility/opportunity. These WalkUPs can be broken down into two types: reasonable affordability with high access, like Cambridge, Coolidge Corner, and the South End, and terrific affordability with reasonable access.

Gold-ranked WalkUPs are mostly commuter rail-served communities located fairly close to Boston, such as Lynn. Thus, in this category there is still frequently a tradeoff between affordability and accessibility. But overall, these places are centrally located and/or relatively accessible from the region via multiple modes of transportation. They support households with a wide range of incomes and provide reasonable work and school opportunities.

Average Key Metrics

Housing & Transportation Costs:
(As a % of median income for Metropolitan Boston)

Housing Cost Burden: 49%
(% of low income households that spend at least 50% of income on housing)

Job Density: 34 per acre

School Quality: 53%
(% of students with proficient or higher reading level)

Transit Accessibility: 15%
(Share of population that can access the WalkUP by transit within 45 minutes)

ABC Commuting: 51%
(Non-car mode commutes)

PLATINUM

Arlington
Charlestown
Chinatown
Mission Hill
MIT/Kendall Square
Newburyport
Northeastern
Roxbury
Tufts
Watertown

CHARACTERISTICS

Ten of the 57 WalkUPs identified in Boston are ranked as Platinum on the social equity scale. Almost all are Inner Core communities very close to the financial and job centers of the region. But they also have remained somewhat affordable to their residents through inclusion of subsidized housing or by retaining traditionally affordable units.

Even here, however, there are tradeoffs between affordability and accessibility; there is not one WalkUP that manages to score Platinum on both subscales. Scoring Gold in both categories is enough to place a WalkUP into the overall Platinum category due to this tradeoff, as happens, for example, with Arlington, Watertown, and Roxbury.

Average Key Metrics

Housing & Transportation Costs:
(As a % of median income for Metropolitan Boston)

Housing Cost Burden: 43%
(% of low income households that spend at least 50% of income on housing)

Job Density: 41 per acre

School Quality: 67%
(% of students with proficient or higher reading level)

Transit Accessibility: 18%
(Share of population that can access the WalkUP by transit within 45 minutes)

ABC Commuting: 49%
(Non-car mode commutes)

FUTURE WALKUPS

WalkUPs: The Next Wave

There are more WalkUPs in Metropolitan Boston waiting in the wings, the vast majority in the suburbs.

In addition to the established WalkUPs, we also identified where WalkUPs may develop in the future. Our analysis found two categories of such places: Emerging and Potential. Emerging WalkUPs are those places that narrowly missed the minimum thresholds for either walkability or the quantity of commercial space that characterize the Established WalkUPs. With the addition of one or two new developments or a slightly denser street grid, these Emerging WalkUPs would move into the ranks of the established.

Unlike in Atlanta, where the Emerging WalkUPs were mainly drivable sub-urban commercial concentrations in the process of urbanizing, in Boston we found older urban town centers or close-in industrial areas that are already walkable to some extent. Almost all of them have high Walk Scores but they do not quite have enough commercial space to meet the threshold. Some had an auto-oriented street layout despite the moderately high Walk Score.

Potential WalkUPs are areas that have certain attributes that lend themselves to the development of a walkable urban place in the future as well as the demonstrated intent to become a walkable urban place, even if they currently lack critical mass. They are not well-defined "places" as such. Therefore, we have only listed the towns in the Boston region that contain them, rather than attempt to give each a name or define the geography. To be considered a potential WalkUP, towns must have at least some land area that meets the following criteria for both physical attributes and intent, meaning taking action to approve appropriate zoning, creating place management organizations, etc.:

- **Physical Attributes:** *At leass one of the following:*
  - Located within a half mile of a **rail transit station**
  - **Gross density residential units** ≥ 8 per acre within a quarter mile
  - **Intersection density** ≥ 100 per square mile
- **Measure of Intent:** *Participate in or designation of some area under one of the following Commonwealth of Massachusetts programs:*
  - Chapter 43D or 43E
  - Gateway City
  - Growth District Initiative grant
  - District Local Technical Assistance Program
  - Approved Chapter 40R district
  - Priority Development Area
  - Mixed use zoning adoption

Assembly Row
Brickbottom - Innerbelt
Brighton
Chelsea
Danvers
East Boston
Ipswich
Leominster
Lexington
Mansfield
Needham
Newmarket/ Widett Circle
North Attleborough
Wellesley Square

EMERGING WALKUPS

The 14 Emerging WalkUPs fall primarily into two camps—suburban town centers and close-in neighborhoods that are transitioning. The suburban town centers include, Danvers, Ipswich, Leominster, Lexington, Mansfield, Needham and Wellesley Square. All of these places could be considered local-serving Walkable Neighborhoods today but they are on the cusp of becoming regionally significant according to our definition. That is because they all have at least 306,000 square feet of retail, which is 90 percent of the 340,000 square foot threshold used for the established WalkUPs.

The close-in neighborhoods include Assembly Row, Chelsea, Newmarket/Widett Circle, Brickbottom/ Innerbelt, and East Boston. Assembly Row is a new mixed-use development project on a brownfield site in Somerville that only recently completed its first phase, which includes 320,000 square feet of retail, 445 apartments, and 100,000 square feet of office. When complete, it will have over 600,000 square feet of retail and 2.8 million square feet of office, more than enough for it to qualify as an established WalkUP. The Brickbottom/Innerbelt area, also in Somerville, will have a new Green Line transit station, possibly as early as 2017, and various plans exist for transit-oriented development around it. Newmarket/ Widett Circle is a primarily light industrial and retail area but a recent rezoning initiative and the opening of a new transit station in 2013 have laid the foundation for more a more walkable future. Finally, Chelsea and East Boston are urban commercial neighborhoods that have not quite met the criteria for the quantity of commercial space, but are very close.

Everett
Melrose
Methuen
Natick
Reading
Revere
Stoughton
Winchester

POTENTIAL WALKUPS

We identified 31 towns in the Boston metro area with at least some land area that met the potential criteria and that was not already designated as a WalkUP or an emerging WalkUP. However, for the majority of these places, the potential land area is located around places already designated as established or emerging WalkUPs. For example, much of Lynn, Somerville, and Dorchester in Boston met the potential criteria, but on land that was near an existing WalkUP. This confirms the notion that many WalkUPs have the potential for more development both within and around their existing boundaries.

Those towns with land that qualified as potential WalkUPs but which do not have an Established or Emerging WalkUP are listed.

NEXT STEPS

Conclusions & Recommendations

Metropolitan Boston is leading the country toward a walkable urban future. This is the time to develop conscious social equity strategies to address the walkable urban price premiums inherent in this trend. Failure to balance social equity and economic performance will stifle both.

For the last half of the 20th century, drivable sub-urban developments dominated the real estate development industry. The expansion of the highway system, the love affair with automobiles, the dream of having a piece of land to call one's own and being away from the declining center city motivated this shift. This form of development became imbedded in federal and state public policy with massive subsidies to provide the market in the post-war era what it wanted. For over 50 years, developers, homebuilders, and banks perfected a business model that transformed millions of acres across the country into Drivable Sub-divisions, business parks, strip shopping centers and regional malls.

This research has produced findings that indicate drivable sub-urban development may be nearing its end in some product types and that, at least in some metropolitan areas, "peak sprawl" may already have been reached. Metropolitan Boston is one of those metro areas moving beyond sprawl. This report has demonstrated not only strong and rising valuation premiums in WalkUPs and Walkable Neighborhoods for almost all product types, but also that walkable urbanism appears to be reversing its decades-long loss of market share to drivable sub-urban areas, particularly for office, hotel, and rental apartments.

INVESTMENT & DEVELOPMENT STRATEGIES

The shift towards walkable urbanism has major implications for real estate investors and policymakers. If current trends continue, drivable sub-urban real estate values are at risk of continued stagnation while values in WalkUPs and Walkable Neighborhoods will likely continue to increase.

But different economic and social equity performance levels of WalkUPs and Walkable Neighborhoods imply that different investment strategies will be required. For example:

- **Investing in a Copper WalkUP on the economic scale or Walkable Neighborhood** means that a long-term time frame is required to maximize returns, though entry prices are relatively modest. Place strategy and management for a Copper WalkUP are particularly important to ensure economic performance.

  Starting to preserve affordable housing early in the process will be easier in a Copper-ranked place. And building adequate rail and bus transit, as well as biking and walking infrastructure, will promote economic development and social equity.

- **Silver WalkUPs and Walkable Neighborhoods** probably have the greatest potential for value appreciation and growth, but will take at least a mid-term time frame for an economic return to be achieved.

  The social equity situation may show a misleading picture. There is a confusing mix of long-time residents and businesses in lower-cost space commingling with the new higher-price entrants. This provides the diversity many people want, but it might quickly switch to a more homogeneous high-end place unless conscious social equity strategies are adopted and implemented.

- **Investing in Gold or Platinum WalkUPs and Walkable Neighborhoods** is much less risky as reflected in the high price of entry. Platinum investments might have less upside, but are more stable and, thus, make them more attractive to institutional investors (insurance companies, pension funds, REITs, etc.).

  Engaging in social equity strategies, such as increased affordable housing and new transit, biking and walkability infrastructure is much more expensive in Gold and Platinum places if the effort is left until it achieves this high economic performance due to high land prices. Better to have started earlier in the redevelopment process.

POLICY IMPLICATIONS

Policymakers must understand how to position their communities to take advantage of this shift in market demand. At a minimum, the government must not discourage walkable urban development with outdated, auto-oriented zoning codes and parking regulations, or long public approval processes. The best approach for growing the economy, increasing local tax revenues and boosting funding for social equity strategies is increasing the supply of developable, walkable urban properties. The legal constraint on walkable urban supply is the number one reason for the substantial price premiums this research has uncovered.

Doing the minimum, however, may not be enough for many communities that have long suffered from disinvestment and a poor image to harness the potential of this shift in market demand. This is particularly true for those WalkUPs and Walkable Neighborhoods ranked Copper on the economic scale. In many cases, a major catalytic development effort is needed to transform these places and demonstrate their potential. Without public investment and appropriate zoning, these projects can be difficult to get off the ground, yet the payoff for the public investment has proven to be dramatic. And there is no need to subsidize these catalytic developments. Investing *pari passu* with private sector partners is the best approach, leading to eventual payback of capital with a hoped-for return, which can be invested in the next round of projects.

TRANSPORTATION AND INFRASTRUCTURE

The importance of investing in transportation infrastructure, particularly rail and bus transit, as well as biking and walking, cannot be underestimated. Transportation has always been one of the most significant determining factors behind the shape of the built environment and it is no different today. Rail transit in particular facilitates walkable urbanism. There will always be cars, and therefore roads, for the foreseeable future as a crucial element in a transportation system. However, car transportation should be viewed as one of many transportation options consumers should have. Metro Boston will have a hard enough time maintaining existing roadways that are already in place, so it is important to think twice before adding new roadway capacity.

Expensive as investments in rail transit and walkable urban infrastructure may be, there are growing indications, as this research indicates, that walkable urban development generates higher economic development and fiscal returns than drivable sub-urban development. Educated people are the foundation of the modern knowledge economy, and they seem to be drawn to metro areas with walkable urbanism. This is especially true of the millennial generation and the so-called creative class. Boston has already capitalized on this to sustain one of the highest educated workforces in the country, but competition for these people is intense. Transportation infrastructure that supports walkable urban development is the best investment for the future economy and tax base of Metro Boston.

PROTECTING SOCIAL EQUITY

Public support of walkable urban development in Metropolitan Boston must have a simultaneous commitment to social equity, providing increased opportunity to households that need affordable work force housing and transit, biking, and walkable accessibility to that opportunity. In the long run, an increased supply of walkable urban infrastructure and development is the major answer to the social equity challenge. However, the pent-up demand for walkable urbanism will probably take many years to address, resulting in continued price premiums at even higher rents and prices. What is needed is a conscious strategy in the short- and mid-term to achieve social equity, using the many tools that are available. These tools include expanding the current tax credit programs for rehabilitation, and low income housing and commercial space, inclusionary zoning, legalizing auxiliary dwelling units, investing public and nonprofit land into affordable and work force housing development, implementing anti-eviction policies, real estate transfer taxes, community benefit agreements, condo conversion ordinances, and there are many more tactics to consider.[28]

FINAL COMMENTS

The research in Metro Boston and across the country demonstrates that walkable urban development can lead to an upward spiral of value creation; more development improves the quality of life, produces higher economic returns, boosts tax revenue and provides more money that can be invested in social equity strategies. However, it is more important than ever to ensure that this new cycle of investment does not displace existing residents, and provides additional opportunities for low-income households to live and work in WalkUps. And the amount of land currently used for the walkable urban inventory, 5.6 percent of the regional land mass, is obviously a tiny fraction of the metro area. This small supply of walkable urban land is the major reason for the price premiums. Increasing the density of the existing walkable urban land and adding more walkable urban places, both WalkUPs and Walkable Neighborhoods, will fuel that upward spiral and increase the quality of life while improving the social equity of the metropolitan area.

APPENDICES

Endnotes

1. Leinberger, Christopher B., *The Option of Urbanism, Investing in a New Amercian Dream*, Island Press, (Washington, DC), 2008, page 8.
2. These two terms employ the logic that "transportation drives development," a principle that has been at work through the 6,000-year history of city/metropolitan building. The construction of these descriptive terms starts with the transportation system (drivable and walkable) and continues with the form that results (sub-urban and urban). There is a third form of the built environment, drivable urban, pioneered in theory by the Swiss architect, Le Corbusier. Best known in this country as "skyscrapers in the park," it was infamously adopted for much of 20th century public housing and has been judged to be a massive failure, as the demolition of these "vertical slums" demonstrates. China's rapid urbanization is predicated on this form of development, and the jury is out on whether this will result in a similar tragedy or not.
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6. "The Rise of Innovation Districts: A New Geography of Innovation in America," May 2014. http://www.brookings.edu/~/media/Programs/metro/Images/Innovation/InnovationDistricts1.pdf
7. Intersection density is a measure of the number of road crossings per square mile. Drivable sub-urban development tends to have very low intersection density, reflecting super-blocks compatible with car/truck traffic, while walkable urban tendtends to have high intersection density, reflecting smaller blocks compatible with walking. The intersection density calculations in this report are based on the quantity of non auto-oriented intersections as determined by the EPA for the EPA smart location database mentioned above in endnote 2.
8. "Travel and the Built Environment: A Meta-Analysis," Reid Ewing and Robert Cervero, *Journal of the American Planning Association*, Volume 76, Issue 3, 2010.
9. "Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTRAQ," *American Journal of Preventive Medicine*, 2005. http://www.yorku.ca/alison3/kahs6020/urban%20form%20-%20SMARTRAQ%20-%20Am%20J%20Prev%20Med%202005_28.pdf
10. This analysis excludes interstates and transit because they serve a regional function.
11. The data on square footage presented here is based on LA3 parcel data, a database of parcel-level data and CoStar. The LA3 parcel data, provided by MAPC, was used for the overall total, as well as the for-sale residential category. The estimates for office, retail, multifamily rental apartments, and industrial square footage come from CoStar. Neither data source is perfect for this exercise. CoStar does not track the entire universe of properties. The LA3 parcel data is not up to date for all towns in the metro area and does not identify whether a property is rented or owned. As such, these numbers should be treated as approximations. In particular, note that some properties in the for-sale residential category are actually rented.
12. Much of the space listed under Civic/Institutional falls into the "owner user" category of space. This includes many non-profits, universities, government buildings and other commercial space that occupied by non-tax paying entities. Although the assessment data permits an analysis of the total square footage and assessed value in this category, it does not permit breakdowns of this information by product type. This is a challenge across the country and will have to be addressed as further research is completed analyzing the totality of the built environment.
13. As an example of the calculation of caps rates, if a property has an annual net income of $1,000 and it is sold for $10,000, the cap rate is 10 percent ($1,000/$10,000). If it is sold for $20,000, the cap rate is five percent ($1,000/$20,000). Lower cap rates are indicative of higher real estate values.
14. This data is based on information provided by Cushman and Wakefield. Cap rates represent averages weighted by the dollar volume of the transaction. For WalkUPs, almost all of the

Endnotes

transactions from which this average is derived, took place in WalkUPs within the Inner Core. Cap rates in outlying suburban town centers are more likely to be in line with those of the rest of the region.

15. Analysis assumes that expenses as a percentage of rent revenue are equal in the different areas

16. STR (Smith Travel)

17. CBRE, http://www.cbre.us/o/fortlauderdale/AssetLibrary/Cap%20Rate%20Study%20First%20Half%202014.pdf

18. This analysis is based on arms-length property closing data provided by the Massachusetts Department of Revenue Division of Local Services (https://dlsgateway.dor.state.ma.us/gateway/Public/WebForms/LA3/LA3Search.aspx) and square footage information contained in the MAPC parcel layer. Note that no data was available for sales in the City of Boston in 2005 and 2007. Therefore, those years are excluded from the charts.

19. MAPC, http://www.mapc.org/projections

20. Office, retail, rental apartment, and hotel deliveries are based on CoStar data. For-sale residential square footage is based on the parcel data provided by MAPC. Note, however, that the data for the most recent cycle (09-14) may not be accurate because not all towns have provided up-to-date data through 2014. The actual share of for-sale residential deliveries in the most recent cycle could be higher or lower.

21. "A Matter of Degrees: The Effect of Educational Attainment on Regional Economic Prosperity." *The Milken Institute*. Feb. 27, 2013. http://www.milkeninstitute.org/publications/view/564

22. "Where Young People are Choosing to Live," *The New York Times*, October 20, 2014. http://www.nytimes.com/2014/10/20/upshot/where-young-college-graduates-are-choosing-to-live.html?_r=0&abt=0002&abg=0

23. Richard Florida, *The Rise of the Creative Class* (New York, Basic Books, 2012).

24. Leinberger, Christopher B. and Lynch, Patrick, *Foot Traffic Ahead: Ranking Walkable Urbanism in America's 30 Largest Metros*," June 2014. http://issuu.com/gwbusiness/docs/foot_traffic_ahead/1.

25. Data on age and education in 2000 is not available below the Census tract level. Therefore, this estimate is based on a translation of 2000 census tract data to the defined geographies, as well 2009-2013 American Community Survey tract data to the defined geographies.

26. This research defines critical mass as a WalkUP that requires no extraordinary public investment or subsidy to stimulate the next real estate project. Silver and Copper WalkUPs may require public sector involvement to get a new project underway.

27. The "favored quarter" is the roughly 90-degree arc coming out of the downtown of the center city where the majority of upper-middle income households live and most commercial development, especially employment, occurred during the late 20th century. Every metro area has a favored quarter of growth, though a few mega-metros, like New York and Los Angeles, have two or more.

28. http://www.mapc.org/long-term-affordability-strategies

Chart Data Sources:

PAGE 8: *Share of Income Property During the Last Three Real Estate Cycles*
Source: CoStar

PAGE 9: *Key Metrics by Land Use*
Sources: American Community Survey 2008-2012; InfoUSA 2011; Massachusetts Land Parcel Database; CoStar

PAGE 22: *Average Road Length per Capita*
Source: CREUA analysis of road data provided Massachusetts Department of Transportation; excludes Interstates

PAGE 23: *Share of Square Footage of Metropolitan Property Types in WalkUPs vs. Edge Cities* and *Share of Residential & Income-Producing Square Footage by Land Use Type*
Sources: Massachusetts Land Parcel Database; CoStar

PAGE 25: *Average Home Sale Price* (two charts)
Sources: CREUA analysis of transaction data from the Massachusetts Department of Revenue; Massachusetts Land Parcel Database

PAGE 29: *Share of Metro Income Property Square Footage Developed in WalkUPs & Walkable Neighborhoods*
Sources: CoStar; Massachusetts Land Parcel Database

PAGE 30 & 31: *Walkable Urbanism, Higher Education & Metropolitan GDP in the Top 30 U.S. Metros* (three charts)
Sources: CREUA; American Community Survey 2008-2012; Bureau of Economic Analysis

PAGE 34: *Average Rents by Product Type*
Sources: Cushman and Wakefield; CoStar; CREUA
Assessed Values per Acre
Source: Massachusetts Land Parcel Database

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Any mistakes in this report are the responsibility of the authors, not the above individuals and organizations.

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WHAT DO THE BEST ENTREPRENEURS WANT IN A CITY?

Lessons from the Founders of America's Fastest-Growing Companies

a report from:

Endeavor Insight

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We believe that the magic formula for attracting and retaining the best entrepreneurs is this: a great place to live plus a talented pool of potential employees, and excellent access to customers and suppliers.

EXECUTIVE SUMMARY

The founders of high-growth companies are among the most important job creators in the world. In order to learn how cities can attract and retain these entrepreneurs, Endeavor Insight conducted surveys and interviews with 150 founders from some of the fastest-growing companies in the U.S. Our initial analysis identified two interesting patterns:

- **The vast majority of entrepreneurs in our study started their companies in metropolitan areas with at least one million residents.**
- **These entrepreneurs are highly mobile as young adults, but once they launch a company in a specifc city they are very likely to remain there.**

In light of these facts, we asked the entrepreneurs why they chose to start their companies in the respective cities where they did so. Their responses revealed four lessons on what leads these founders to establish businesses in certain cities and not others:

- **Entrepreneurs at fast-growing firms usually decide where to live based on personal connections and quality of life factors many years before they start their firms.**
- **These founders value a pool of talented employees more than any other business-related resource that cities can offer.**
- **Access to customers and suppliers is the second most valuable business-related resource that cities can provide, according to these entrepreneurs.**
- **The founders in our study rarely cite low tax rates or business-friendly regulations as reasons for starting a business in a specific city.**

This report was created by Rhett Morris in December 2013. He wishes to thank John Bowman, who conducted research surveys and interviews for this project, as well as Fernando Fabre, Mike Goodwin, and Joanna Harries who provided critical input and feedback. This research was inspired by "The Ascent of America's High-Growth Companies" series of publications released by the Kauffman Foundation in 2012. For additional information on this research, please contact Rhett Morris at rhett.morris@endeavor.org.

INTRODUCTION

The founders of high-growth companies are important job creators. They tend to start their firms in cities and rarely relocate them.

Research shows that a relatively small number of fast-growing firms have the ability to create a large number of new jobs. For example, between 1994 and 2006, the fastest-growing American companies represented less than 3% of all firms, but generated almost all U.S. employment and revenue growth.[1]

In order to learn how cities can attract and retain the best entrepreneurs, Endeavor Insight conducted surveys and interviews with 150 entrepreneurs who lead some of America's fastest-growing firms. The companies of these entrepreneurs were listed on the Inc. 500 list of fastest-growing U.S. firms in 2010, 2011, or 2012. At the time they were included on the Inc. 500, the companies had an average of approximately 100 employees and $20 million in annual revenues, and each had experienced revenue growth of more than 600% during the previous three years.

These companies work in dozens of different industries and are located everywhere from Portland, Maine to Los Angeles, California. They include media companies in Chicago and San Francisco, software companies in Atlanta and Boulder, and food and beverage firms in Seattle and New York. Some are only a few years old, while others have existed for more than a decade.

Most of the entrepreneurs who lead these companies live in cities. About 40% of our respondents live in the ten largest metropolitan areas of the country, each of which have 4.5 million or more residents. An additional 40% live in other metropolitan areas with populations between 1 and 4.5 million.

Previous research from the Kauffman Foundation has shown that the founders of Inc. 500 companies are highly mobile as young adults. Seventy-five percent of these entrepreneurs started their company in a different city from the one where they received their final university degree.[2] However, our analysis shows that after an entrepreneur launched her company in a city, she rarely relocated the firm to a new metropolitan area. Nearly 90% of the entrepreneurs in our study (131 out of 150) continued to locate their companies in the individual cities where they were founded.

We analyzed the responses of these 131 entrepreneurs in order to identify the factors that enable cities to attract and retain entrepreneurs who create fast-growing companies. The next pages share four important lessons for local policymakers and business leaders.

PHOTO: FLICKR USER SJ CAREY


GM
Rivard

LESSON #1

Entrepreneurs at fast-growing firms usually decide where to live based on personal connections and quality of life factors many years before they start their firms.

Key findings:

- **80% of entrepreneurs had lived in their city for at least two years before founding their company.**
- **Close to half of respondents cited their current residence as a factor in deciding where to launch their company.**

As the introduction noted, entrepreneurs who lead fast-growing firms are highly mobile during their young adult years. However, our research identified an interesting trend: most of the founders in our study moved to their current city many years before they decided to start their company. Eighty percent of the entrepreneurs we surveyed had lived in their city for more than two years before founding their business, and the typical respondent had lived in his city for over seven years before starting his firm.

The most common reason cited by entrepreneurs for launching their business in a given city was that it was where they lived at the time. The entrepreneurs who cited this reason usually mentioned their personal connections to their city or specific quality of life factors, such as access to nature or local cultural attractions, as the quotations on the opposite page illustrate. Interestingly, quality of life factors were also cited frequently by the entire sample of entrepreneurs that we surveyed. One out of every five respondents discussed these factors as important criteria in deciding where to launch their companies.

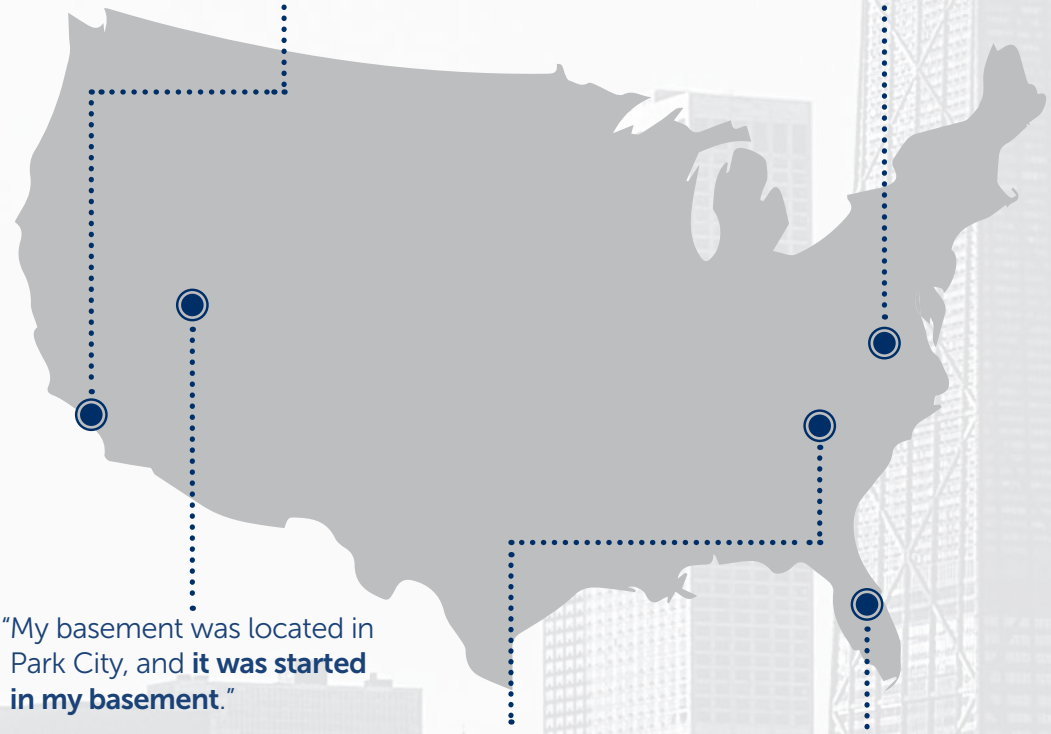
PHOTO: FLICKR USER JAMES CLEAR

SELECTED QUOTATIONS FROM SURVEYED ENTREPRENEURS

Why did you choose to found your company in the city where you did so?

"**I was able to place my office two blocks from my house,** and one block away from the school my wife teaches at and my children attend."

"**I already happily lived here**. I also had a good feeling that Richmond was where **I was planning to stay for the foreseeable future.**"



"My basement was located in Park City, and **it was started in my basement**."

"**I lived here prior to starting my business**. **Asheville has a great quality of life**, including a vibrant downtown, beautiful nature, and a good community for raising a family."

"**I have lived in Orlando for many years**, so it just made sense to start the company here."

Source: Endeavor Insight Survey of Fast-Growing U.S. Entrepreneurs, 2013. Quotations are drawn from respondents who cited their current residence as a factor in deciding where to found their company.

LESSON #2

Founders of high-growth companies value a pool of talented employees more than any other business-related resource that cities can offer.

Key findings:

- **31% of founders cited access to talent as a factor in their decision on where to launch their company.**
- **20% of entrepreneurs who cited access to talent specifically mentioned the availability of technically skilled employees.**

Though our respondents often emphasized the personal factors that influenced their decisions, their responses also highlighted specific business-related resources that entrepreneurs need to build a successful company. Almost one-third of the entrepreneurs we surveyed cited access to talent as a factor in determining where to start their companies. In fact, a local pool of employees was the most frequently mentioned business-related resource among the founders in our study.

Technical employees are particularly important to these entrepreneurs. One out of every five entrepreneurs who cited access to talent specifically mentioned technical professionals, such as engineers and software developers. Healthcare workers, marketing professionals, and management talent were also mentioned by multiple respondents in our study. A number of founders also highlighted the link between the ability to attract talented employees and a city's quality of life.

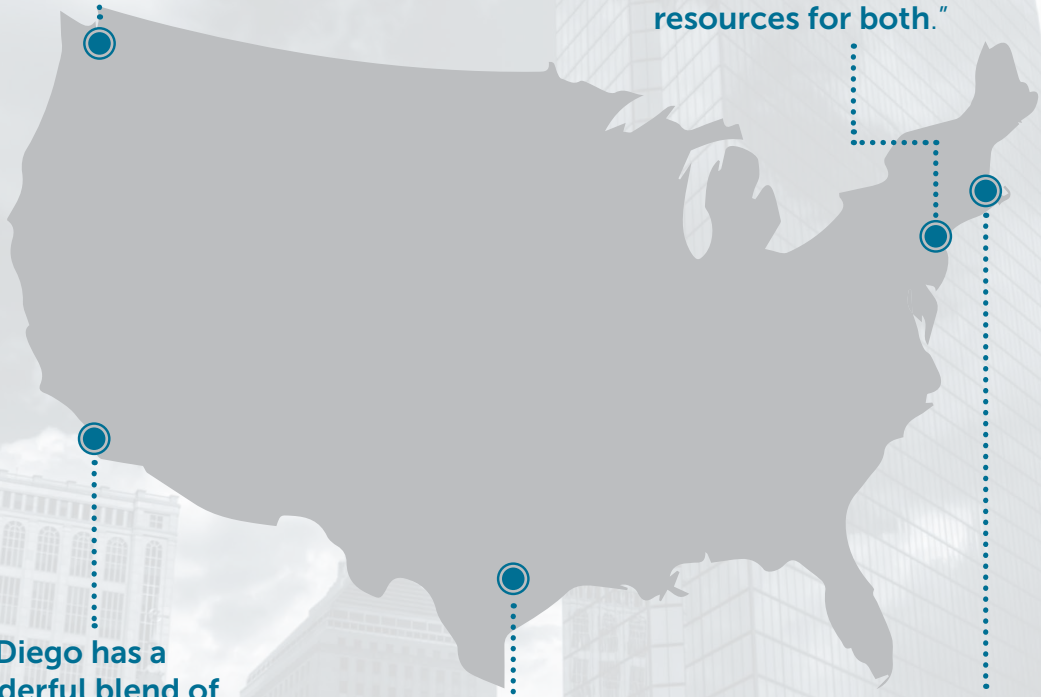
PHOTO: FLICKR USER WERNER KUNZ

SELECTED QUOTATIONS FROM SURVEYED ENTREPRENEURS

Why did you choose to found your company in the city where you did so?

"**Employees want to live and work here**. We knew that when we moved here and later started the company."

"**Human capital is the most essential common ingredient** of all startups...We had to tackle technical and financial challenges. New York City was the only place that offered **outstanding resources for both**."



"**San Diego has a wonderful blend of tech talent** coming out of Qualcomm, the defense contractors, and especially UCSD."

"**It's a great place to recruit local talent** and great place to invite other potential employees to move to."

"I chose Boston because of the cultural life: symphony, colleges, theater, beautiful architecture, etc. **These things attract the kind of intelligent people we'd like to employ**."

Source: Endeavor Insight Survey of Fast-Growing U.S. Entrepreneurs, 2013. Quotations are drawn from respondents who cited access to talent as a factor in deciding where to found their company.

LESSON #3

Access to customers and suppliers is the second most valuable business-related resource that cities can provide, according to the founders of rapidly expanding firms.

Key findings:

- **Approximately one in five entrepreneurs cited access to clients and suppliers as a factor in deciding where to launch their company.**
- **Twenty-one percent of respondents in our study cited geographic factors, such as proximity to other large population centers.**

Access to talent was not the only business-related resource mentioned by the entrepreneurs in our study. Nineteen percent of the respondents also cited access to markets, in the form of clients or suppliers, as a factor in their decision to locate their company in the specific city where they did so. This response was most common among entrepreneurs leading companies that sell to other businesses, rather than individual consumers.

The importance of access to customers and suppliers can also be seen among founders who highlight the availability of local transportation options that make it easier to reach other markets. These include both airports and highways. Twenty-one percent of respondents in our study cited factors such as these, or general proximity to other large population centers.

PHOTO: FLICKR USER UCUMARI

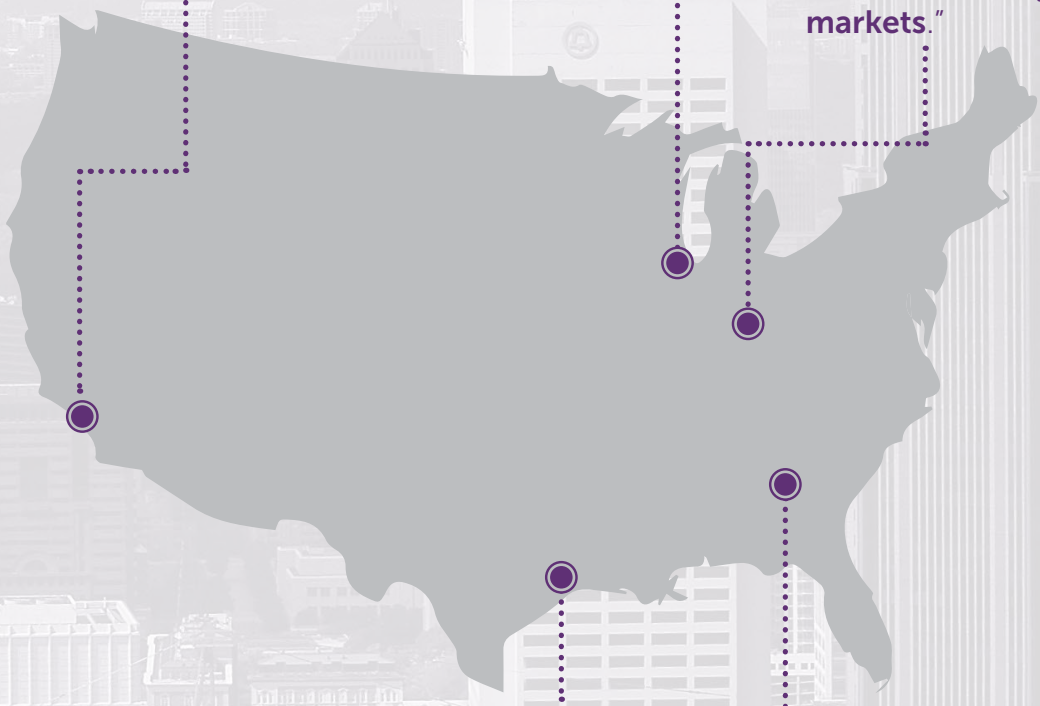
SELECTED QUOTATIONS FROM SURVEYED ENTREPRENEURS

Why did you choose to found your company in the city where you did so?

"Studios, such as Disney, Warner Brothers, and Dreamworks, are **our customers and are in or near Burbank**...we also manufacture and many of our vendors are in Burbank."

"**Central location.** We are able to meet with anyone in the United States at 9 a.m."

"It's located in the Midwest making it **closer to many markets**."



"Houston is the **global hub for many clients** in the oil and gas industry."

"Atlanta is appealing because **there are a lot of companies we can provide our services** to in a variety of industries."

Source: Endeavor Insight Survey of Fast-Growing U.S. Entrepreneurs, 2013. Quotations are drawn from respondents who cited access to clients and suppliers as a factor in deciding where to found their company.

LESSON #4

Entrepreneurs who lead fast-growing companies rarely cite low tax rates or business-friendly regulations as reasons for starting businesses in a specific city.

Key findings:

- **Only 5% of entrepreneurs cited low tax rates as a factor in deciding where to launch their company.**
- **Only 2% of respondents mentioned business-friendly regulations or policies when discussing why they founded their company in a specific city.**

While it is important to focus on the factors that entrepreneurs cited most frequently, we should also take note of what entrepreneurs did not mention. Two factors that are often discussed by policymakers and business leaders — low tax rates and business-friendly regulations — were mentioned only a handful of times in our surveys and interviews. In fact, words related to specific quality of life factors, such as "park" and "restaurants," were discussed more frequently than terms related to taxes and regulations, as the list on page 13 illustrates.

All of the entrepreneurs in this study lead fast-growing companies in the U.S. and therefore operate under relatively similar regulatory policies and taxation codes. We believe that the lack of discussion of these factors indicates that marginal differences in these areas at the state or municipal level have little influence on great entrepreneurs' decision-making processes.

PHOTO: FLICKR USER THOMAS HAWK

MOST COMMON DESCRIPTIVE WORDS IN ENTREPRENEURS' RESPONSES LISTED IN DESCENDING ORDER OF FREQUENCY

Why did you choose to found your company in the city where you did so?

talent
lived
home
people
community
live
years
living
close
cost
family
town
employees
office
proximity
tech
clients
companies
space
work
college
quality
school
time
life
pool
residence
back
grow
hub
move
moved
reasonable
rent
resources
airport
building
center
day
local
near
park
professionals
restaurants
technology
travel
ability
affordable
attract
build
businesses
capital
central
choice
culture
global
graduated
growing
industries
industry
market
schools
services
tax
girlfriend
homes
honest
job
media
opportunity
stay
traffic
universities
wife
world
balanced
basement
beautiful
chamber
cheap
country
diverse
draw
drive
enterprise
facilities
grew
highways
hours
house
impact
income
medicine
members
mortgage
mountains
national
network
opportunities
parents
program
vendors
weather
working
young
zone

Source: Endeavor Insight Survey of Fast-Growing U.S. Entrepreneurs, 2013. Note: Non-descriptive words, such as "like," "also," and "first," have been removed from this list. Responses were drawn from the 131 entrepreneurs who continued to locate their individual companies in the cities where the firms were founded.

CONCLUSION

Cities that wish to foster high-growth entrepreneurship should work to improve quality of life factors, increase the supply of talent, and expand access to clients and vendors.

We believe that the magic formula for attracting and retaining the best entrepreneurs is this: a great place to live plus a talented pool of potential employees, and excellent access to customers and suppliers. According to the entrepreneurs in our study, cities that offer these resources are more likely to benefit from fast-growing companies that create jobs and increase prosperity in their communities.

Evidence supporting this conclusion can be found in Washington, D.C. and New York City, the two U.S. cities that have generated the largest number of Inc. 500 companies according to analysis from the Kauffman Foundation.[3] Washington has been ranked as the fifth best city for quality of life in the U.S. and its workforce has a greater percentage of college graduates than any other U.S. metropolitan area.[4] Access to customers and suppliers is hard to assess with city-level rankings, but it is worth noting that greater Washington ranks among the top U.S. metropolitan areas for the number of local Fortune 500 companies.[5]

New York's performance is quite similar. It is ranked as the sixth best city for quality of life in the U.S.[6] In terms of its percentage of college-educated residents, it is the number 12 city in the country and, on an absolute basis, New York has more college graduates than any other metropolitan area.[7] New York also has more Fortune 500 companies than any other metropolitan area in the world.[8]

Though Washington and New York perform quite well in measures that assess the attributes valued by high-growth entrepreneurs, the tax and regulatory environments of these cities are rated quite poorly compared to the rest of the country. The 2012 Business Tax Index ranked Washington D.C. as the worst performing area in the U.S. and the state of New York ranked 48th in the nation.[9] (Individual cities are not typically evaluated by indices that rank tax and regulatory policies, since most of the differences among locations are due to state-level legislation.)

Though the data from Washington D.C. and New York City supports the analysis in this study, we believe that further research is needed in this area to confirm and deepen these findings and to understand how the importance of these factors might differ in cities outside of the U.S. Our team at Endeavor Insight plans to conduct further research in this area through our work in the Americas, Africa, Asia, Europe, and the Middle East.

ENDNOTES

1. Zoltan J. Acs, William Parsons, and Spencer Tracy, High-Impact Firms: Gazelles Revisited, (Washington: Small Business Administration Office of Advocacy, 2008) 2.
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3. Ibid.
4. Miriam Siscovick, "2012 Quality of Living Worldwide City Rankings," 4 Dec 2012, Mercer.com, 6 Nov 2013 <http://www.mercer.com/press-releases/quality-of-living-report-2012>; Sabrina Tavernise, "A Gap in College Graduates Leaves Some Cities Behind," 30 May 2012, Nytimes.com, 6 Nov 2013 <http://www.nytimes.com/interactive/2012/05/31/us/education-in-metro-areas.html>.
5. Endeavor Insight analysis based on 2013 Fortune 500 List.
6. Miriam Siscovick, "2012 Quality of Living Worldwide City Rankings," 4 Dec 2012, Mercer.com, 6 Nov 2013 <http://www.mercer.com/press-releases/quality-of-living-report-2012>.
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8. Endeavor Insight analysis based on 2013 Fortune 500 List.
9. Raymond Keating, Business Tax Index 2012, (Washington D.C.: Small Business & Entrepreneurship Council, 2012) 4.

ABOUT US

Endeavor is leading the global high-impact entrepreneurship movement to catalyze long-term economic growth. Over the past fifteen years, Endeavor has selected, mentored, and accelerated the best high-impact entrepreneurs around the world. To date, Endeavor has screened more than 30,000 entrepreneurs and selected 800+ individuals leading 500+ high-impact companies. These entrepreneurs represent over 225,000 jobs and over $6 billion in revenues in 2012 and inspired future generations to innovate and become entrepreneurs too.

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Endeavor Insight, Endeavor's research arm, studies high-impact entrepreneurs and their contribution to job creation and economic growth. Its research educates policymakers and practitioners and helps them to accelerate entrepreneurs' success and the development of entrepreneurship ecosystems around the world. In 2013, Endeavor Insight joined with the Kauffman Foundation and the World Bank, to co-found the Global Entrepreneurship Research Network.

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INSIGHT

Omidyar Network is a philanthropic investment firm dedicated to harnessing the power of markets to create opportunity for people to improve their lives. Established in 2004 by eBay founder Pierre Omidyar and his wife Pam, the organization invests in and helps scale innovative organizations to catalyze economic and social change. To date, Omidyar Network has committed more than $669 million to for-profit companies and non-profit organizations that foster economic advancement and encourage individual participation across multiple initiatives, including entrepreneurship, financial inclusion, property rights, government transparency, consumer Internet and mobile. To learn more, visit www.omidyar.com.

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