CAMBRIDGE
REDEVELOPMENT
AUTHORITY

Board Packet of Supporting Materials
February 14, 2018

i. Agenda

1. Draft Minutes of the Regular Meeting of the Board on January 17, 2018

2. Memorandum from Just-A-Start regarding Fire Suppression System Grant/Loan for Squirrelwood Project, January 9, 2018

3. CRA Comment Letter to EEA Secretary regarding I-90 Viaduct Replacement Project, February 9, 2018

---

5. 2017 CRA Annual Report

6. City Design Plan for Binney Street Park, Parcel 7 of KSURP

7. KSURP-MXD Privately Owned Open Spaces Inventory Memo

8. 2018 Parcel Six Food Truck Program Memo

---

10. Foundry Operator RFP

11. Odyssey Advisors GASB 74/75 Actuarial Valuation for CRA

12. Monthly Financial Update

(Document numbering altered to reflect agenda item numbers)

CAMBRIDGE
REDEVELOPMENT
AUTHORITY

NOTICE OF MEETING

Pursuant to the Massachusetts Open Meeting Law, M.G.L. c. 30A, §§ 18-25, notice is hereby given of a meeting of the Cambridge Redevelopment Authority (CRA) to take place as follows:

Annual Board Meeting
Wednesday, February 14, 2018 at 5:30 PM
Cambridge Police Department
First Floor Community Room
125 Sixth Street
Cambridge, Massachusetts 02142

MEETING AGENDA

The following is a proposed agenda containing the items the Chair of the CRA reasonably anticipates will be discussed at the meeting:

Call

Public Comment

Minutes

1. Motion: To accept the minutes of the Regular Meeting of the Board on January 17, 2018 *

Communications

2. Memorandum from Bill Gordon of Just-A-Start regarding Fire Suppression System Grant/Loan for Squirrelwood Project, January 9, 2018

3. Comment Letter from CRA to Mathew Beaton regarding I-90 Viaduct Replacement Project, February 9, 2018

Reports, Motions and Discussion Items:

4. Election of Officers (Mr. Evans)

5. Report: 2017 Annual Report of the Cambridge Redevelopment Authority (Mr. Evans) *

6. Update: Design Plans for Binney Street Park, Parcel 7 of the Kendall Square Urban Renewal Plan Area (Mr. Dash) *

7. Presentation: KSURP-MXD Private Open Space Inventory (Ms. Levering) *

8. Update: 2018 Parcel Six Food Truck Program (Mr. Peralta) *

9. Discussion: Community Impact Funding programs (Mr. Evans)

10. Update: Foundry Operator RFP (Mr. Evans) *

11. Report: Odyssey Advisors GASB 74/75 Actuarial Valuation and Findings (Ms. Shore) *

    Motion: To modify the CRA Investment Policy to allow up to 60% of the OPEB Plan account to be prudently invested in equities, in order to increase the discount rate of the fund in accordance with the December 2017 GASB report.

12. Report: Monthly Financial Update (Mr. Evans) *

<u>Other Business</u>

At 8:00 PM, the Board will convene in Executive Session for the purpose of discussing lease negotiations for office space at 255 Main Street (One Cambridge Center) within the Kendall Square Urban Renewal Area.

If the Board has concluded all of the business set forth on the regular agenda by the starting time of the Executive Session, the Board will not reconvene in open session thereafter.

<u>Adjournment</u>

(*) Supporting material to be posted at: www.cambridgeredevelopment.org/next-meeting/

Upcoming Meetings:

- CRA Design Review Committee Meeting – March 21, 2018 – 4:30 PM
- Regular CRA Board Meeting – April 11, 2018 - 5:30 PM

The Cambridge Redevelopment Authority is a “local public body” for the purpose of the Open Meeting Law pursuant to M. G. L. c. 30A, § 18. M. G. L. c. 30A, § 20, provides, in relevant part:

(b) Except in an emergency, in addition to any notice otherwise required by law, a public body shall post notice of every meeting at least 48 hours prior to such meeting, excluding Saturdays, Sundays and legal holidays. In an emergency, a public body shall post notice as soon as reasonably possible prior to such meeting. Notice shall be printed in a legible, easily understandable format and shall contain the date, time and place of such meeting and a listing of topics that the chair reasonably anticipates will be discussed at the meeting.

(c) For meetings of a local public body, notice shall be filed with the municipal clerk and posted in a manner conspicuously visible to the public at all hours in or on the municipal building in which the clerk's office is located.

P 617-492-6800 | F 617-492-6804
255 Main Street | 4th Floor | Cambridge, MA 02142
cambridgeredevelopment.org

Regular Board Meeting
Cambridge Redevelopment Authority

Wednesday, January 17, 2018 5:30pm
Robert Healy Public Safety Center / Cambridge Police Station / Community Room
125 Sixth Street, Cambridge, MA

DRAFT Meeting Minutes

Call

Chair Kathleen Born called the meeting to order at 5:32 p.m. Other Board members present were Vice Chair Margaret Drury, Treasurer Christopher Bator, Assistant Treasurer Conrad Crawford and Assistant Secretary Barry Zevin. Executive Director Tom Evans and other CRA staff members were also present.

The meeting is being recorded by the CRA.

Public Comment

There were no requests for public comment.

The motion to close public comment carried unanimously.

Minutes

1. Motion: To accept the minutes of the Regular Meeting of the Board on December 20, 2017

There were no comments made.

The motion to accept the minutes and place them on file carried unanimously.

Reports, Motions, and Discussion Items

2. Presentation: Innovators for Purpose Installation for Galaxy Park

Carlos Peralta explained that Innovators 4 Purpose (I4P) has used their 2017 Forward Fund Grant to create a wayfinding sculpture that they would like to install in Galaxy Park. They are here to explain the project, gather feedback, and gain approval for the installation.

Michael Dawson, the co-founder of I4P explained that the mission of the organization is to illuminate pathways and open doors for under-represented youth in the areas of design, science, technology, and entrepreneurship. He spoke about his past experiences and how they relate to the mission. He introduced other I4P staff mentors who were present. Three of the ten students that participated in the wayfinding project gave a presentation to the Board. Mr. Dawson said that the idea was proposed in March 2017 but after speaking with Boston Properties, the design was changed to be more artistic and more fitting for Kendall Square. Because of the major design changes, only one of the three initially proposed locations can be accomplished with the funds. A student explained the steps used in the process, from site and history research to modeling. A second student spoke about the physical dimensions, installation location, and interactive nature of the structure. “The Looking Glass” sculpture is a see-through ring that includes current and historical information about Kendall Square. It will be fabricated by Bluebird Graphics, who also built the KSA wayfinding signs and the KSQ sculpture on the plaza. Another student spoke about the design, content, and location of five supporting informational signs. The Looking Glass and one informational supporting sign are slated to be installed in April 2018, barring any objections. There will also be a plaque thanking supporters of the project. Phase 2 includes the other four informational signs. Mr. Dawson spoke about future ideas for the group. The group continues to look for additional partnerships and financial support.

Mr. Zevin said that he was encouraged that the sculpture would bring more activity to the grassy area of the park. He suggested spell-checking before fabricating the signs as well as raising the structure above grade-level to prevent mowers and snow from destroying it. Ms. Born liked the proposal and said that this will be a visitor's Kendall Square picture-taking spot. The Board complimented the seventh and eighth graders on their work. The finish is painted brushed aluminum. The lettering will be etched. In response to Heather Hoffman, Mr. Dawson said that a smart phone interface could provide an extensive history of the area, if more funding became available to do this. Mr. Dawson envisions the Galaxy Park Looking Glass as a first stop on a tour with eight to ten other informational structures in Cambridge.

A motion to approve the design for the Looking Glass sculpture and signage installation located within Galaxy Park of the Kendall Square Urban Renewal Area carried unanimously.

3. Discussion: 255 Main Street Innovation Space

Jason Zogg handed out an excerpt from the zoning plan and a portion of the Infill Development Concept Plan (IDCP) that covers innovation space. Michael Tilford, from Boston Properties (BXP), gave a preliminary overview of recent discussions regarding innovation space in the 255 Main Street building. The innovation space is split into two portions - the square footage comes online with the certificate of occupancy of the 145 Broadway building and the square footage that will come online with the certificate of occupancy of the second commercial building in Phase 2. In the CRA's January 23 IDCP approval letter, an innovation space operations plans must be presented to the CRA board within 12 months of the construction documents approval of the 145 Broadway building. This presentation is a preliminary discussion in preparation for meeting the July 2018 deadline. Mr. Zogg explained that the MXD zoning district has an additional requirement of a 25% below-market innovation portion for GFA exemption on the innovation space. In response to Mr. Crawford, Mr. Evans explained that the goal was to create at least a minimum threshold of density of innovation space.

Mr. Tilford presented the initial concepts which will be continually worked on for the next six months. As mentioned, the innovation concept is a big part of the IDCP approval. To satisfy the 75% market-rate innovation component, Mr. Tilford said that BXP and the Cambridge Innovation Center (CIC) are in advanced negotiations. The 25% below-market space would provide co-location, educational opportunities, and certificate programs for under-represented populations within the technology sector. He admitted that BXP needs assistance is creating and running such a space and would like to explore various scenarios with the CRA. Iterative presentations can be made to the board before July to ensure a more cohesive plan.

In addition to the innovation space component, Mr. Tilford said that BXP is focusing on all the components that need to be accomplished at the time of the 145 Broadway certificate of occupancy, including the Sixth Street Walkway, retail at 255 Main Street, and the Alta roadway plan design work. Mr. Evans added that the innovation topic coincides with conversations with the City regarding workforce development and enhancing connections between the technology ecosystem and the community. Some of these programs could be stepping stones to programs at the Foundry and the Volpe. Although not required, Mr. Tilford said that all the below market innovation space could be made available at the same time as opposed to waiting for Phase 2.

Mr. Evans asked the Board to consider the level of CRA involvement to orchestrate the 25% innovation space. The CRA would not facilitate the training but facilitate the use of the space. Some members of City Council would like CRA to become more involved in workforce development. The CRA could leverage the resource of space in Kendall Square, its connections to employers, and its connections to nonprofits. The CRA would not be replacing existing programs in the community. Mr. Evans emphasized that this is just a concept at this point and many more conversations need to occur.

Ms. Born was hopeful that this could also bring meaning to the glass "ceremonial" entrance of the 255 Main Street building and be an opportunity to highlight the Kendall Square area. Mr. Tilford said that as part of the Design Review and Document Approval Process of the Development Agreement between the CRA and BXP, BXP is also exploring ways to activate the blanked-out louver space on Main Street (around the corner from the glass entrance), possibly with rotational food use sans kitchen because the foot-print is constrained.

4. Update: Foundry Redevelopment Process

Kathryn Madden said that at last month's Board meeting, the Board voted to approve the amended lease. Mr. Evans said that he had just picked up a fully executed copy of the lease. This amended lease includes the Cooperation Agreement so there is a broad understanding of how this project will be developed. The designer review process has been completed. Once the City completes negotiation with the selected firm, an announcement will be made. The Operator & Master Tenant RFP is being reviewed by the City's lawyers and the CRA will then issue it directly so that the operator can be at the table with the designer. The plan is for the architect to produce a feasibility study in June, which will evaluate costs, program fit, among other items.

There was a good turnout from the community as well as RFI responders at the Foundry Advisory Committee (FAC) last Friday. The FAC now meets quarterly. Some important topics that have been raised include the community process once the designer and operator are involved, the business plan of the operator, a connection to the park, the new residential development on Third Street, planning for tenant fit-outs, and making sure that the Foundry is complementary to other facilities.

Alex Levering explained that the needs assessment map distributed tonight is a working document. It includes the locations, names, and missions of existing workforce development, visual / performing arts, and community centers that match or complement the mission and goals for the Foundry. This report was done in response to requests for a list of what exists in the community. It is expected to be used by the future operator to build partnerships and ongoing outreach. Ms. Levering said that the data came from various sources starting with a GIS database and then refined from meetings with stakeholders, performance artists, the Cambridge Arts Council, the Department of Workforce Development, and others. Only resources within the City of Cambridge were included. With the exception of three entities, all the organizations have physical addresses.

People suggested some other spaces that could be on the list and acknowledged that there are many spaces in the universities. Mr. Zevin stressed that it is important to avoid building more of what already exists. Mr. Crawford noted that North Cambridge is a desert for performance art locations except for the Fresh Pond movie theater. Mr. Evans said that the lines of public vs. private or art vs. commercial can be blurry. Ms. Hoffman suggested adding public school spaces. Suggestions for other facilities can be sent to Ms. Levering.

Mr. Evan said that staff is ready to issue the RFP as soon as the City completes its review and will set a six-week turn around for the responses Ms. Born said that getting responses for an Operator may be a challenge compared to the designer role. Mr. Evans said that the RFI had 13 responses at varying levels.

5. Discussion: 2018 Forward Fund

Mr. Peralta said that although there were no major changes requested from the Board regarding previous presentations of a 2018 Forward Fund (FF), he is proposing three changes. The first change would extend the timeline for completed projects from one year to two years since many organizations aren't meeting the one-year deadline for various reasons. The second change would allow applicants to submit proposals for additional funds if unforeseen circumstances, like rising construction costs, create a funding shortfall. The last change would allow applicants to use as much as 10% of their grants on the design aspect of their project.

The Board packet includes a draft of the notice of funding availability which includes the aforementioned changes. If approved, a notification postcard would be created and the outreach process would begin immediately. Mr. Evans explained that the 2018 FF budget line item includes $125,000 for 2018 grants as well as 2016 and 2017 grant money for unfinished projects. Rather than encumbering funds, the auditors suggested an easier bookkeeping method of having the Board agree to roll the money into a following budget cycle. This was done when the budget was approved in December 2017. The total amount was not increased as $125,000 seemed to be sufficient for the 2017 cycle. Mr. Bator started a discussion on increased marketing's effect on the total amount needed. He emphasized that if the amount limited significant projects, he would like staff to come back to the Board for a consideration to increase the 2018 amount.

In response to Mr. Crawford, Mr. Evans explained that 10-15% towards design tends to be a benchmark used in building construction projects. He added that there is still a 50-50 match requirement which leverages other funds. Mr. Crawford said that increasing this percentage could help a project meet its timeframe. Mr. Evans clarified that there is a separate line item in the budget for the potential to fund design and feasibility studies for affordable housing sites but more analysis and discussions are needed to determine such a program. There was a discussion on why the FF Planning Grant, offered in 2015 and 2016, had been dropped. There was a discussion of creating partnerships with local banks that do small business loans and that the FF grant could be the down payment. The banks could also help to provide outreach since they already have marketing budgets.

Mr. Peralta said that the application could be released in mid-February and that a beginning date for a 2018 grant could be April 2018. There was a discussion of these dates not aligning with the CRA's fiscal year. Ms. Drury liked the idea of allocating money for planning. Mr. Bator agreed, especially if it would create more proposals. Mr. Evans added the possibility of granting funds for the design portion followed by an evaluation which would then trigger the release of the capital portion of the grant, thus giving the CRA more oversight than previous years' planning grants. Mr. Bator was emphatic about staff requesting more resources, if needed, to grow the program or to allocate to worthwhile project proposals.

In response to Ms. Born's suggestion to tie the FF money to the gains in investment, Mr. Bator explained that the gains were already part of general CRA operating costs. The FF is considered a project above general operating costs. Mr. Evans added that the revenue from the Ames Street development was also used for CRA operations. As projects are being done, the funds in the reserve are being drawn upon thereby creating less interest income. There was a discussion of the possibility of creating an FF endowment to show a clear distinction that CRA investments are being put back into the community.

6. Presentation: 2016 Financial Audit

Mr. Evans said that Chad Clark, from Roselli, Clark and Associates, has been auditing the CRA since Mr. Evans started. Mr. Clark handed out a Financial Report and a Management Letter. This will be posted on-line. Mr. Clark suggested tying any allocated money for a year's Forward Fund program to the gains and/or income from the previous year.

Mr. Clark said that the "Management's Discussion and Analysis" section on pages 4-7 of the Financial Section summarizes the financial situation for 2016. The CRA ended 2016 with about $9 million in cash. There were few liabilities and minimal receivables. The highest liabilities are the traditional liabilities of pension and OPEB. In 2017, he expects the pension liability to decrease but the OPEB liability to increase dramatically due to the new regulations. He explained that, in past years, the OPEB liability has been shown on what had been earned based on actuarial studies. However, under new regulations, the OPEB liability assumes that employees are going to retire, similar to that of the pension plan, and health insurance will be incorporated into the liability. 2017 will be the worst-case liability. This is happening for all government units. Since the CRA approved the OPEB trust fund late in December 2016 but didn't actually have a document or fund the account until the beginning of 2017, Mr. Clark is going to keep 2016 under the old GASB rules. OPEB will not be part of the 2016 report but there will be two reports in 2017 - one for OPEB and one for operations. Mr. Evans added that future discussion of OPEB operations might require its own meeting rather than being included in a CRA regular meeting. In contrast to 2015, there was about $800,000 in development revenue in 2016 and only a quarter of a million-dollar loss. Mr. Clark referred to the chart on page 2 of the Management Letter. He explained that 2012 was the last year of the old regime. In 2013, the expenses dropped and have been increasing incrementally since the transition, which reflects a ramping up of operations in a calculated way. He noted that the expenses are still less than they were in 2012. The chart in the back of the financial report shows the break-out of the individual project expenses, which is a picture of CRA work.

Mr. Clark then discussed items in the Management Letter. The changes to OPEB with respect to the adoption of GASB 74 and 75 were previously discussed. The next item in the letter summarizes the delay in the 2016 audit. Under GASB rules, the 2016 CRA financial statement requires information from the FY16 audit of the Cambridge Retirement System (CRS), which is the pension system for the CRA. The CRS has the same fiscal year as the CRA. Mr. Clark received information from the CRS 2016 audit just last month. The City has a June 30 year-end so, technically, all their reports are due nine months later, on March 31. However, the city does a CAFR Program, a Certificate of Achievement for Excellence in Financial Reporting Program, which shortens the deadline to six months. The same auditor audits the City and the CRS. The CRA has no control over the process. Mr. Clark expressed his frustration in the delay in receiving information for a timely CRA audit report. Although there was a draft of the retirement audit in October, he was unable to obtain access to any information until the final version was released in December.

In lieu of changing the CRA fiscal year, he suggested meeting with KPMG (the auditors of both systems) and possibly the City Finance department to request a faster turnaround. To change the fiscal year, the CRA would need to contact its legal counsel, the state legislature, and the Department of Housing and Community Development (DHCD). Mr. Clark said that there are varying fiscal year-ends among authorities. Mr. Evans noted that DHCD has a requirement for an annual report that conveniently coincides with the current CRA fiscal year. The other issue noted in the audit report is that the substantially large 2017 income causes the CRA to be more “material" to the City. If the CRS audit report continues to be delayed and KPMG puts the CRA into the City’s CAFR report, Mr. Clark would not have adequate time to complete his report to respond to the City’s CAFR deadline. Ms. Born suggested a meeting with the City Auditor, Mr. Evans, and possibly the CRA Treasurer and Assistant Treasurer. Mr. Bator would also like to ask counsel’s preliminary view on the statutory language. Although the CRA functions as an independent entity, the City Manager still appoints four of the five Board members, making the CRA a component unit of the City’s financial picture. Mr. Evans added that having a fiscal year off-cycle with the City’s fiscal year can be helpful if City resources are constrained at the end of their fiscal year. Mr. Clark said that he cannot issue an audit report for more than 12 months so a shift to a new fiscal year would have to start with a six-month cycle. If the KPMG report moves up 60-90 days, there would no issue with the City’s CAFR deadline.

The next item relates to state regulations. The CRA, as an entity subject to Chapter 30B procurement laws, is required to have an MA IG Office certified procurement officer. Mr. Evans said that 9 full days (three 3-day courses) are needed for certification. Mr. Clark said that the person doesn’t need to be the Executive Director. The person could also be hired. Using an attorney doesn’t qualify because certification requires a municipal official.

The last item is land held for development. These fragment parcels are noted on page 6 of the financial report as “development property previously held for sale that was deemed completely impaired.” The assessor’s office data is still being analyzed for accuracy by staff. There are procurement laws and ordinances for land dispositions.

Mr. Clark emphasized that all the old financial management issues have been closed.

The motion to put the 2016 financial report and management letter on file carried unanimously.

Mr. Clark noted that there is no contract for Roselli and Clark to return in 2017. Auditors are exempt from 30B procurements. The Board discussed the issue of changing auditors and how the knowledge base that Mr. Clark has obtained regarding the past and current financial picture of the CRA is important at this time. Mr. Evans recommended not changing fiscal years and auditors at the same time. The contract would need to come to the board. Mr. Clark said that he usually writes a three-year contract but a contract can be revised if a six-month review cycle is required.

7. Presentation: Staff Report and Quarterly Financial Update

Since the last meeting, there have been two holidays and an office move to the 8th floor. A new lease with Boston Properties (BXP) was negotiated over the holidays and BXP signed it today. A ribbon cutting open house event will be organized. Mr. Evans explained the layout of the eighth floor. The CRA and Panjiva, who is the other tenant asked to relocate from the 4th floor, take up about one-fifth of the eighth floor. The CRA and Panjiva are using some of the furniture that was left by Microsoft, but most of it is being stored on the floor in anticipation of the possible future workforce development program. The topic of the time spent on Microsoft's entrance and blade-sign was discussed as well as why they moved out of 255 Main Street. Because of the inconvenience, BXP reduced the CRA rent significantly.

Veolia has some unfinished work in the Grand Junction Park. The work that they were doing on Binney Street Park is fully completed. This took a lot of negotiations and staff time. Restoration to the grassy landscaped area will be done this spring. The trees seemed to have survived. The temporary signage that the Board approved for the 88 Ames Street building, Proto, has gone up. The apartment mock-up is at 90 Broadway. Mr. Zevin questioned the strategy of covering up the mock-up with the window signs. In response to Ms. Drury, Mr. Evans explained that Akamai headquarters is moving to 145 Broadway but is also remaining in their existing building at 8 Cambridge Center. The vertical construction of the 145 Broadway is underway.

Mr. Evans will discuss emerging 2018 projects at next month's meeting. The annual report will also be presented at that meeting. Ms. Drury's reappointment is coming up in April. The financial report shows unaudited figures for 2017. There was a net income of $18 million. The administrative expenses were on target but most of the other expenses were under budget. The snow funds allocation weren't needed and the landscape maintenance expenses were only 50% of what was budgeted, partially because the Grand Junction Park was under construction for a significant part of the year. There was a jump in the electricity expense for Galaxy Park this winter, possibly due to the tree lighting or heating the pump room. Some of the cost is due to a switch to green electricity. Boston Properties reimburses the CRA for half of the electricity expenses. Looking at the charts for 2017, there are four major expense categories. The actual expense of the Personnel category is lower than budgeted because the Q4 payment to GIC has not been received and Ms. Levering didn't come onboard until September. One reason for the lower than expected actual expenses in Professional Services was due to a slowdown of the streetscape design process. The Veolia disruption took away from staff time which caused the procurement scope for an archivist as well as a designer for the Parcel 3 interstitial spaces in 2017 to be pushed to 2018. Funds for these projects were moved to the 2018 budget.

Mr. Evans distributed a correction to the 2018 budget. On page 3, the highlighted yellow lines show an error in the summed calculations for the total for Professional Services, Total Expenses, and Net Operating Income. The rightmost column shows the correct values of the corrected sums. The amounts in the individual line items were not changed.

Mr. Evans said that the budget amount incorporates a COLA adjustment but the actual amount wasn't mentioned. The City had a COLA increase of a 2.5% for 2018 and the CRA could follow suit.

A motion to approve a COLA increase of 2.5% for all appropriate personnel, consistent with the City of Cambridge, starting January 1, 2018 was seconded.

A role call was taken.

Mr. Bator - yes
Mr. Crawford - yes
Ms. Born - yes
Ms. Drury - yes
Mr. Bator - yes

The motion carried unanimously.

Adjournment

A motion to adjourn the meeting carried unanimously at 9:17 p.m.

Just-A-Start Corporation
1035 Cambridge St. Suite 12, Cambridge, MA 02141

Memo

To: Thomas Evans

From: Bill Gordon

cc: Craig Nicholson, Elizabeth Marsh

Date: 1/8/2018

Re: Fire Suppression System Grant/Loan for Squirrelwood Project

---

Tom,

As I am sure you recall, we recently met to discuss a potential grant from the Cambridge Redevelopment Authority (CRA) to Just-A-Start (JAS) to provide financial support for installing fire suppression systems throughout the Linwood Court site, which will be refinanced and rehabilitated in 2019, as part of the Squirrelwood project.

We've previously discussed the CRA's interest in using funds received through MXD Development Revenue on affordable housing efforts in the Wellington-Harrington Neighborhood (WHN). The CRA committed financing to the JAS Consolidation project for the installation of fire suppression systems after the devastating fire at St. Patrick's Place in 2016. These funds will have a huge impact on the safety and sense of security of our residents. Similarly to St. Patrick's Place, Linwood Court is located close to the Wellington-Harrington neighborhood, and also has a high priority need for sprinkler systems. We feel it is an excellent match with how the CRA might like to allocate MXD Development Revenue. Our request is for $420,000 (seven buildings/44 Units).

I have attached a brief project description of our Squirrelwood project. It involves the refinancing and consolidation of two separate projects- Linwood Court and Squirrel Brand- into one project. The project will include approximately $10.5M of renovations to 65 units of existing housing as well as adding two new buildings and an addition totaling 23 new units of affordable and Workforce housing on the Linwood Court site. This will be a 2019 project, and it has a tax exempt bond volume cap allocation and 4% LIHTC's as the major source of financing, along with the assumption of existing City and State debt, state historic tax credits, and several new state soft funding sources.

Without CRA funding, the project cannot afford to install fire suppression systems in all the buildings. After last year's fire at 50 York, fire safety is a top priority for JAS. We have attached a spreadsheet that details all the buildings in the project.

After reviewing the attached project description and spreadsheet please let me know what other information you need. If needed, we will be happy to meet with you and/or present to your board. Finally, we are submitting a OneStop funding application to MassHousing in February. It would be very helpful to get a commitment of receiving funds from the CRA prior to our submission.

Thank you,

Bill Gordon

Squirrelwood Project Overview

Just-A-Start Corporation is undertaking the refinancing and rehabilitation of two existing JAS properties. These two existing Just-A-Start properties consist of 65 units on two sites across the street from each other. Linwood Court, an expiring 13A property, has 8 buildings with 45 units. Squirrel Brand, a LIHTC property that completed its 15 year compliance period in 2016, consists of an 18 unit converted candy warehouse, in addition to a two-family building across the street.

We plan to build 23 new units in three new buildings on the Linwood Court site. Ten of the units will be restricted for Workforce Housing and the remainder will be LIHTC eligible. Three of the new units will be added onto the back of an existing three-story building. The other twenty units will be in two new free-standing buildings. One will be an elevatored four-story building with fourteen units. The other will be a non-elevatored three-story building with six units.

We have completed our community outreach process, and have not received any significant opposition to the project. Our meetings with the City of Cambridge development and planning staff have also been positive. We will be submitting our 40B site eligibility application to MassHousing in November. The project has already accepted $4.8 million of funding from MassHousing for the 13A preservation and has been allocated $1 million for Workforce Housing.

Development Team:

Developer:	Just-A-Start Corporation
Architect:	Davis Square Architects
Attorney:	Klein Hornig
Management Company:	Maloney Properties

Assumptions:

Ownership Structure: LLC
Building Size: 104,420 sq. ft. (existing)
Project Scope: Rehab of 10 buildings on 2 sites, 2 new buildings and 1 addition to Linwood Court
Number of Units: 65 existing, 23 new
Unit Breakdown: 3 studios, 8 (2 existing, 12 new) 1-bedrooms, 30 (24 existing, 8 new) 2-bedrooms, 35 (32 existing, 3 new) 3-bedrooms, 4 4+ bedrooms
Rent: 1-bedroom- $994/month average
  2-bedroom- $1192/month average
  3-bedroom- $1377/month average
  4 and 5-bedroom- $1616/month average
Subsidy: 24 potential MRVPs at Linwood (16 currently in use), 8 PBV at Squirrel, Operating Costs: $933,791

Anticipated Closing and Construction Start: 1st Quarter 2019

Squirrelwood

Schedule of Properties

	location	# Units	# fl's	PRIORITY MATRIX High Priority	Medium Priority	Currently Sprinkled	Type	Date Built	Date Rehab
Wellington-Harrington Development Corp.									
1	261/63 Broadway	4	2		1		double 2-decker	1889	1973
2	267 Broadway	1	2				Single family	1838	1973
3	269 Broadway	6	3		1		double 3-decker	1911	1973
4	200 Columbia	6	3	1			double 3-decker	1911	1973
5	204 Columbia	8	4	1			double 4-decker	1890	1973
6	210 Columbia	8	4		1		double 4-decker	1892	1973
7	1-6 Linwood Place	6	2		1		Townhouses	1893	1973
8	40 Market	6	3	1			double 3-decker	1893	1973
		45		**3**	**4**	**0**			
				3	@ $60K / bldg =	$ 420,000			

CAMBRIDGE
REDEVELOPMENT
AUTHORITY

P 617-492-6800 | F 617-492-6804
255 Main Street | 4th Floor | Cambridge, MA 02142
cambridgeredevelopment.org

Matthew Beaton, Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs
Attn.: Alex Strysky, MEPA Office
EEA No. 15278
100 Cambridge Street, 9th Floor
Boston, MA 02114

Dear Secretary Beaton,

The Cambridge Redevelopment Authority (CRA) appreciates the opportunity to comment on the I-90 Allston Viaduct Project's Draft Environmental Impact Report (DEIR).

The CRA, in its role of administering the Kendall Square Urban Renewal Plan since the 1965, has a deep interest in the I-90 Allston Viaduct replacement and West Station. This Allston Viaduct Project (the Project) is a once-in-a-generation opportunity to re-use former industrial and railroad land to create the next regional innovation district to complement Kendall Square. More importantly, as a transportation project, this Project can establish connectivity between major nodes in the Boston region, which have been disconnected by existing transportation infrastructure. The CRA feels that the Project should be revised to support the transportation mode share and greenhouse gas emissions (GHGs) policies of the Commonwealth as well as the sustainable transportation goals of Boston and Cambridge. Unfortunately, the CRA finds the Highway Viaduct alternative, and the current project phasing plan to be detrimental to future transit-oriented development in Alston and regional, multi-modal connectivity.

<u>The CRA requests that the Secretary of Environmental Affairs issue a certificate for the DEIR that requires the early phasing of West Station and pursues an alternative design that enhances transportation connectivity across the project site.</u>

Below is a list of detailed recommendations in <u>underlined text</u> supported by accompanying paragraphs which the CRA strongly advises the Secretary of Environmental Affairs and MassDOT to consider for the DEIR certificate:

1. West Station

West Station should be completed in Phase One.

It is essential that West Station be prioritized and implemented in the first phase of the project. The station is fundamental in creating a transit-oriented neighborhood with sustainable transportation rather than auto-centric development.

The CRA has significant experience facilitating transit-oriented development (TOD) to spur economic growth. The success of the Kendall Square Innovation District is dependent on two primary geographic factors; its location next to MIT and its position on the Red Line. As the MEPA requirement of a 1994 amendment to the Kendall Square Urban Renewal Plan, the CRA has conducted over 20 years of annual traffic counts. During the 2000's, Kendall Square added over four million square feet of new development, yet vehicular traffic decreased by 14% due to strong transit connectivity, street designs that supports walking and biking, and municipal transportation demand management policy. Kendall Square developed around an existing rail transit station into a model for TOD and the MassDOT should take provide the Allston Yards neighborhood the same opportunity.

The DEIR's Purpose and Needs chapter notes that the Project prioritizes smart growth development, as well as functioning as a "connecting link" for the area. Constructing West Station in the first phase is the only way for the project to achieve these stated DEIR goals. The infrastructure that is put in place before development will influence its growth, form, and operation. Retrofitting this new multi-million square-foot urban district for transit later will be an irreversible short sighted missed opportunity the state and region cannot afford.

<u>The CRA asks that the Secretary of Energy and Environmental Affairs require in the DEIR certificate that the transit portion of this project is fully integrated into Phase One in the Final Environmental Impact Report (FEIR).</u>

2. Grand Junction Railroad Bridge

Rebuild the Grand Junction Railroad Bridge over Soldiers Field Road as part of the I-90 project to accommodate two tracks in the future, with 14-foot shared-use path along the side.

One of the most significant omissions to the Highway Viaduct (HV) alternative is the rebuilding of the Grand Junction Rail bridge over Soldiers Field Road and the Charles River. West Station should become a major transit center that connects commuter rail and local buses. This project should accommodate the upgrade of the Grand Junction Rail line to link West Station to MIT, Kendall Square, Cambridge Crossing, and North Station in the future. Two tracks in the redesign of the bridge will be essential to facilitate urban passenger rail on the Grand Junction corridor. An adjacent 14-foot shared use path connection to Cambridge will be essential to facilitate non-motorized modes of transit.

Rebuilding this rail bridge has the added benefit of eliminating the need for the circuitous and small boardwalk that exists today which routes the Paul Dudley White Path (PDW Path) around the base of the bridge. This would eliminate a significant choke point and safety hazard on the high-traffic PDW Path.

The track alignment going into the bridge in the HV alternative creates a very slow track geometry with a reverse curve that would restrict reasonable urban transit rail speeds in this area in the future and may preclude the opportunity for two tracks going on and off a new rail bridge.

A 14-foot shared-use path cantilevered off the side of the new rail bridge would give several opportunities to create connections to the Commonwealth Avenue intersection, as well as West Station, the PDW Path, and the Boston University campus. These are not possible in the HV version.

The assertion in the DEIR that the at-grade options replace the bridge would require a three-year shut down of the Grand Junction rail corridor and cause a 100-mile detour for servicing vehicles between North and South Stations is exaggerated. The past performance of MassDOT conducting major bridge replacements overnight or over weekends in order to minimize disruption of rail or highway traffic proves a rapid bridge replacement can be done with creative design and contract execution. Additionally, when the Grand Junction rail bridge was shut down on short notice for an emergency repair in 2012, Amtrak and MBTA conducted vehicle maintenance at each other's facility. A thoughtful engineering and operational design solution should be able to design scenarios to significantly reduce the operational cost of that closure.

<u>The CRA requests that the Secretary of Environmental Affairs require in the DEIR certificate that the rebuilding of the Grand Junction Railroad Bridge over Soldiers Field Road and the Charles River with two tracks and a 14-foot shared use path be required scope items included in any final alternative. In order to protect the value of the Grand Junction Corridor as a critical future transit, bike and pedestrian link to Kendall Square, the CRA favors either the Amateur Planner or the ABC alternatives or a combination of the alternatives.</u>

3. Bicycle and Pedestrian Connections

Off-street bicycle and pedestrian connections should be created in the project to accommodate links between the Grand Junction multi-use path to the Paul Dudley White Path (PDW Path) and West Station, as well as creating a Paul Dudley White Path connection under River Street Bridge.

Bicycle and pedestrian connections are critical to support healthy transportation options, to reduce greenhouse gas emissions, and to promote smart growth development. To meet those intentions, incorporating a bicycle and pedestrian connection across the Grand Junction Rail Line to West Station and to the Paul Dudley White Path should be a required component of all scenarios. This would bring the project closer to compliance with the DEIR's Purpose and Needs section which indicates the project prioritizes safe, non-motorized modes of transportation. The AMP development plan provides a pedestrian and bike link to both West Station, while the ABC and HV options only include pedestrian and bike connection to the Paul Dudley White Path, and not West Station.

The project seeks to redevelop the intersection at River Street Bridge and Soldiers Field Road, eliminating the left turn into Cambridge, and creating a wider shared-use bike and pedestrian path that crosses River Street. Creating an additional path that continues at the level of the Charles River and wraps around the arch of the River Street Bridge would allow a safer and more expedited crossing for path users and reduce intersection conflicts. Due to the substantial investment and construction work required at this intersection in the project, this safety enhancement should be integrated into the project. This would bring the project closer to compliance with the DEIR's Purpose and Needs section which notes that the project prioritizes safe, non-motorized modes of transportation. Both Cambridge and Boston have signed the Vision Zero pledge to eliminate fatalities on roadways.

The Secretary of Energy and Environmental Affairs should require in the DEIR certificate that any alternative that advances to the FEIR must include connections from the future Grand Junction shared-use path to the PDW Path as well as to West Station, and must include a path connection under the River Street Bridge to increase safety at the River Street intersection. These connections are necessary in order for the project to be in alignment with its stated Purpose and Need and the Vision Zero goals of Boston and Cambridge.

4. North-South Bus Connections

Include the Malvern Street Bus, Bike, Pedestrian Only Bridge to allow North-South bus connections from Harvard to Longwood Medical area in Phase One.

The need for North-South bus connections from Harvard to Longwood was identified by I-90 Task Force members and representatives from Cambridge and Boston. The Longwood Medical area is one of the top destinations for people in Kendall Square to travel to and from, which is shown in many travel demand surveys and historic work on the Urban Ring project. Bus connections would be fundamental in improving the regional and local transportation system.

The DEIR does not include recommendations or plans on how West Station will be integrated into existing bus route schedules or how bus routes across Boston, Cambridge, and Brookline would change to serve this new hub. It is important to have a more complete understanding of demand for West Station, as well as the need for a North-South bus connection.

The CRA requests that the Secretary of Energy and Environmental Affairs include in the DEIR certificate a requirement that the preferred alternative that advances to the FEIR include a Malvern Street Bus/Bike/Pedestrian only bridge and an analysis of bus routes through the site within a thorough transit demand study.

5. Transit Modeling

The project should be required to perform a comprehensive transit study and demand analysis using revised maximum build-out numbers for development, and include existing roadway physical constraints in adjacent municipalities.

The DEIR's transit analysis is inadequate for a project of this potential impact. The DEIR's estimate of 250 daily riders at West Station in 2040 significantly underestimates future transit demand. It only considers commuters using the Worcester Rail Line under a significantly depressed development projection. It does not plan for transit riders travelling to West Station via existing or new bus routes or using urban rail on the Grand Junction corridor between North Station, Cambridge Crossing, and Kendall/MIT. The transit estimates also do not accommodate the scale of development under consideration. A comprehensive transit study that includes bus and urban rail on the Grand Junction corridor should be implemented by the I-90 project, allowing input from the City of Cambridge, the City of Boston and MAPC. This study should accommodate transit-oriented development in Allston and districts connected to the future West Station and it should model scenarios with high transit mode share expectations.

The CRA requests that the Secretary of Energy and Environmental Affairs include in the DEIR certificate a requirement that a comprehensive transit study be a commitment within the FEIR.

6. Street Design

Design local streets to have a minimal number of vehicular lanes and to include protected bicycle facilities and dedicated bus lanes.

The DEIR's Purpose and Needs section notes the project prioritizes safe, non-motorized modes of transportation. In recent years, the City of Cambridge and the CRA have spent significant resources to retrofit some of Kendall Square's roadways to enhance multi-modal transit options that were not adequately planned in the original development. To design a balanced and safer streetscape environment, local streets should be generally limited to one lane. Any wider streets for vehicle throughput should be thoughtfully designed to safely accommodate bicycles and pedestrians with protected intersections. A boulevard design might also be considered to carry traffic to and from I-90 while providing a lower volume to local side streets. The Allston district will struggle to provide a comfortable walkable neighborhood if all the street sections are sized for peak-hour congestion. This project could learn lessons from our experience over-building for private automobiles and then retrofitting its street system with raised cycle tracks and bus priority infrastructure.

The CRA requests that the Secretary of Energy and Environmental Affairs include in the DEIR certificate a requirement that the local street system be designed to include raised curb-level cycle tracks, dedicated bus lanes, and bus priority infrastructure.

7. Open Space

Achieve wider separated bike and pedestrian paths and open space on the river in the throat section. This includes creating a soft edge, or building platforms, over the Charles River to create greater space for a shared-use path and open space.

The CRA is interested in the enhancement of both sides of the Charles River and a shared natural and recreation resource for the region. The project should provide enough space for separate bike and pedestrian paths along the river in the throat section, as well as the other sections of the Charles within the project area. The benefits of extending a soft edge instead of rip rap/sea wall are significant. It can provide room for separate bicycle and pedestrian paths, the ability to add 30-40 feet of additional open space to the base condition, and a better tree and plant cover than exists today, thereby offsetting some of the heat island effect caused by the adjacent roadway infrastructure. Doing something like this reduces about 6% of the width of the river at one of the two widest points in the Basin.

The edge of the Charles in the project area is not a pristine natural river, as it has been modified many times over its history. Currently, the bank of the Charles River in this section is a sea wall made from concrete rip-rap with a narrow shared-use path along the roadway. It has an inadequate width to handle the current or future bike and pedestrian traffic. Restoring the edge of the Charles back to a more natural condition would make scenic and habitat enhancements while accommodating linear transportation and recreation facilities. The Allston Landing Chapter of DCR's 2002 Charles River Basin Plan calls for a wider soft edge using a combination of fill and platforms. Examples of similar strategies to enhance the riverfront on regulated water bodies are plentiful across the nation, including approvals by the Army Corps of Engineers.

In order to achieve this space for separate bike and pedestrian paths and open space, the I-90 vehicle lanes in all alternatives should be maintained at their existing lane width of 11.5 feet and shoulders should not be expanded to excessive widths. More space could be gained if a lane is dropped on the Turnpike in the eastbound direction, thereby matching the number of through-lanes that are present just beyond both ends of the project.

The Secretary of Energy and Environmental Affairs should include in the DEIR certificate a requirement that the project include the study of an expansion of a soft edge along the Charles River in order to accommodate separate bicycle and pedestrian paths and expand riverfront open space.

8. GHG Emissions

As designed and phased, the project does not adequately address GHG emissions and the goals of the Massachusetts Global Warming Solutions Act

According to the Massachusetts Global Warming Solutions Act, MassDOT and the MBTA must contribute to an 80% reduction of greenhouse (GHG) emissions by 2050. With nearly 40% of Massachusetts GHG emissions coming from the transportation sector, MassDOT and MBTA have a significant role in facilitating the state's requirements by 2050. However, MassDOT and MBTA are not maximizing the opportunity for this project to reduce GHG emissions if the transit portion is not committed, programmed, and fully implemented at the same time as the highway portion:

1. Pushing the transit portion of the project to 2040 significantly delays the emission benefits that accrue from growth in transit ridership;
2. The design of the project including local roadways, bike and pedestrian connections, and transit expansions as presented in the DEIR does not adequately catalyze a fully bicycle, pedestrian, and transit-oriented district projected to include millions of square feet of land development before 2040;
3. It does not include new north-south bus connections across the turnpike/tracks and Charles River;
4. It does not include future rail transit expansion on the Grand Junction rail corridor in the travel demand analysis;
5. It limits bicycle and pedestrian connections within the project area through the exclusion of pathways to and from the transit station and vertical connections to the Paul Dudley White Path PDW path in some scenarios. MassDOT and the Boston Region MPO are required to demonstrate its GHG emissions reductions under 310 CMR 60.05 – in order to do so, significant bicycle, pedestrian and transit improvements must be included with the highway portion of the project as an offset.

The CRA feels that absent of the full bicycle, pedestrian and transit elements described herein, this project is not facilitating the reduction of transportation sector GHG emissions and contributing to the 2050 GHG emission reductions requirements.

Thank you for the opportunity to comment on the DEIR. The CRA looks forward to the evolution of this critical project for the region.

Sincerely,

Tom Evans

Executive Director

2017

SIXTY-FIRST
ANNUAL REPORT

CAMBRIDGE
REDEVELOPMENT
AUTHORITY

CAMBRIDGE
REDEVELOPMENT
AUTHORITY

Table of Contents

Published: February 14th, 2018

Cambridge Redevelopment Authority

The Cambridge Redevelopment Authority (CRA) was founded on November 12, 1956 pursuant to the authority granted by Massachusetts General Law Chapter 121B, § 3.

CRA Board Officers

Kathleen L. Born, Chair
D. Margaret Drury, Vice Chair
Christopher F. Bator, Treasurer
Conrad Crawford, Assistant Treasurer
Barry Zevin, Assistant Secretary

Thomas L. Evans, Executive Director

Cambridge City Council 2017

E. Denise Simmons, Mayor
Marc C. McGovern, Vice Mayor
Dennis J. Carlone
Leland Cheung
Jan Devereux
Craig A. Kelley
David P. Maher
Nadeem A. Mazen
Timothy J. Toomey, Jr.

Louis DePasquale, City Manager
Lisa C. Peterson, Deputy City Manager

MISSION

The CRA is committed to implementing imaginative, creative development that achieves social equity and environmental sustainability. Our goal is to work in the public interest to facilitate infrastructure investments and development projects that integrate commercial, housing, civic and open space uses. We are a public real estate entity with a unique set of development tools, working in close partnership with the City of Cambridge and other organizations.

This Page
View of Cambridge looking Southwest

Opposite Page
TOP / Grand Junction Park in the Summer
CENTER / Food Truck at Parcel 6
BOTTOM / Farmers Market at Kendall Square Plaza

Introduction

Reflecting upon 2017, and the previous three and a half years of work guided by the CRA's Strategic Plan, the progress the CRA has made towards achieving its outlined vision and goals is measurable. All initiatives identified in the Plan are now either completed or underway, and many new projects are under development in Kendall Square and throughout the City. The staff has grown, internal operations are well established, and the near-term fiscal resources of the CRA are secured.

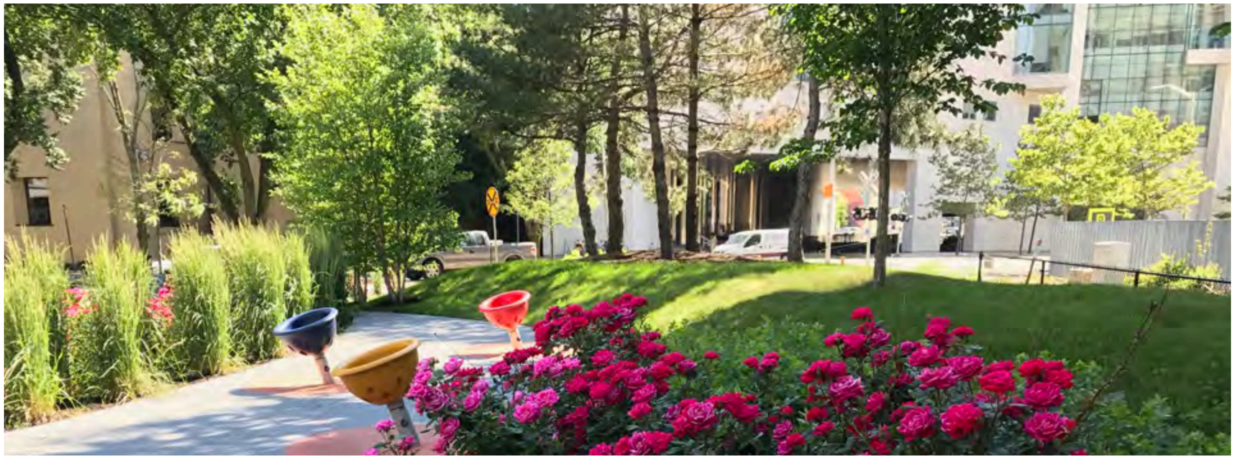
The approval of the MXD Infill Development Concept Plan (IDCP) and the Amended Cambridge Center Development Agreement opened a new chapter for the CRA. The IDCP launched a new round of redevelopment in alignment with the Kendall Square Urban Renewal Plan (KSURP) and the City's K2 Plan. In addition to new commercial and housing construction, the plan will deliver improvements to the retail and open space environment and facilitate the construction of affordable housing and innovation space for start-up and scale-up companies.

Through the sale of development rights under the Development Agreement, the CRA's financial position was strengthened. While a portion of these funds were already committed to existing initiatives, including the Kendall Square Transit Enhancement Program (KSTEP) and the Foundry redevelopment, the CRA has the ability to revisit its strategic priorities and launch new programs serving many different areas of Cambridge.

A key project for the CRA continues to be the Foundry Building in East Cambridge, and with the City, the CRA has charted a better course toward revitalizing the property.

The CRA made an immediate commitment to affordable housing improvements within the Wellington-Harrington area in response to the East Cambridge fire at the end of 2016. The CRA is also facilitating restoration work on the 105 Windsor Street building in the Port neighborhood. Numerous other economic development and community enhancement programs are under development for execution in the years to come.

Within the KSURP, the CRA conducted significant planning and design work toward upcoming public infrastructure investments in Kendall Square, while insuring the high quality maintenance and programming of public spaces.



STRATEGIC PLAN OPERATING PRINCIPLES:

Act: Complement the City's planning role by focusing on implementation using redevelopment tools imaginatively.

Operate with transparency: Be visible and foster face-to-face relationships and a forum for discussing ideas.

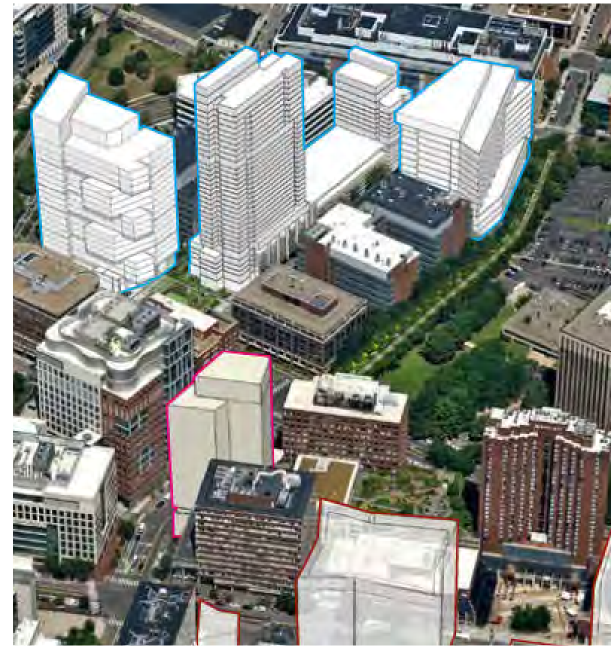
Maximize the public benefit: Serve a broad public purpose with ethically sound practices in partnership with the City and others.

Operate with fiscal responsibility: Use our independent resources wisely to accomplish our mission.

Set an example: Advance thinking on issues; be innovative while maintaining an awareness of history.

This Page
LEFT / Demolition of 11 Cambridge Center
RIGHT / Building Massing in the Infill Development Concept Plan

Opposite Page
CRA Project Map



Activities & Projects

Kendall Square Development/Planning

The CRA and Planning Board approved the final Infill Development Concept Plan (IDCP) for the MXD District in January 2017. The IDCP is an urban design plan for the MXD that details specifics for open space, retail activation, transportation, sustainability, phasing, and more.

This approval coincided with an amendment to the Cambridge Center Development Agreement between Boston Properties (BxP) and the CRA. The agreement revises contractual obligations BxP has under the Kendall Square Urban Renewal Plan, and establishes terms for payment to the CRA for additional development rights. The CRA and BxP also agreed on a new design review procedure for approving new building projects under the IDCP.

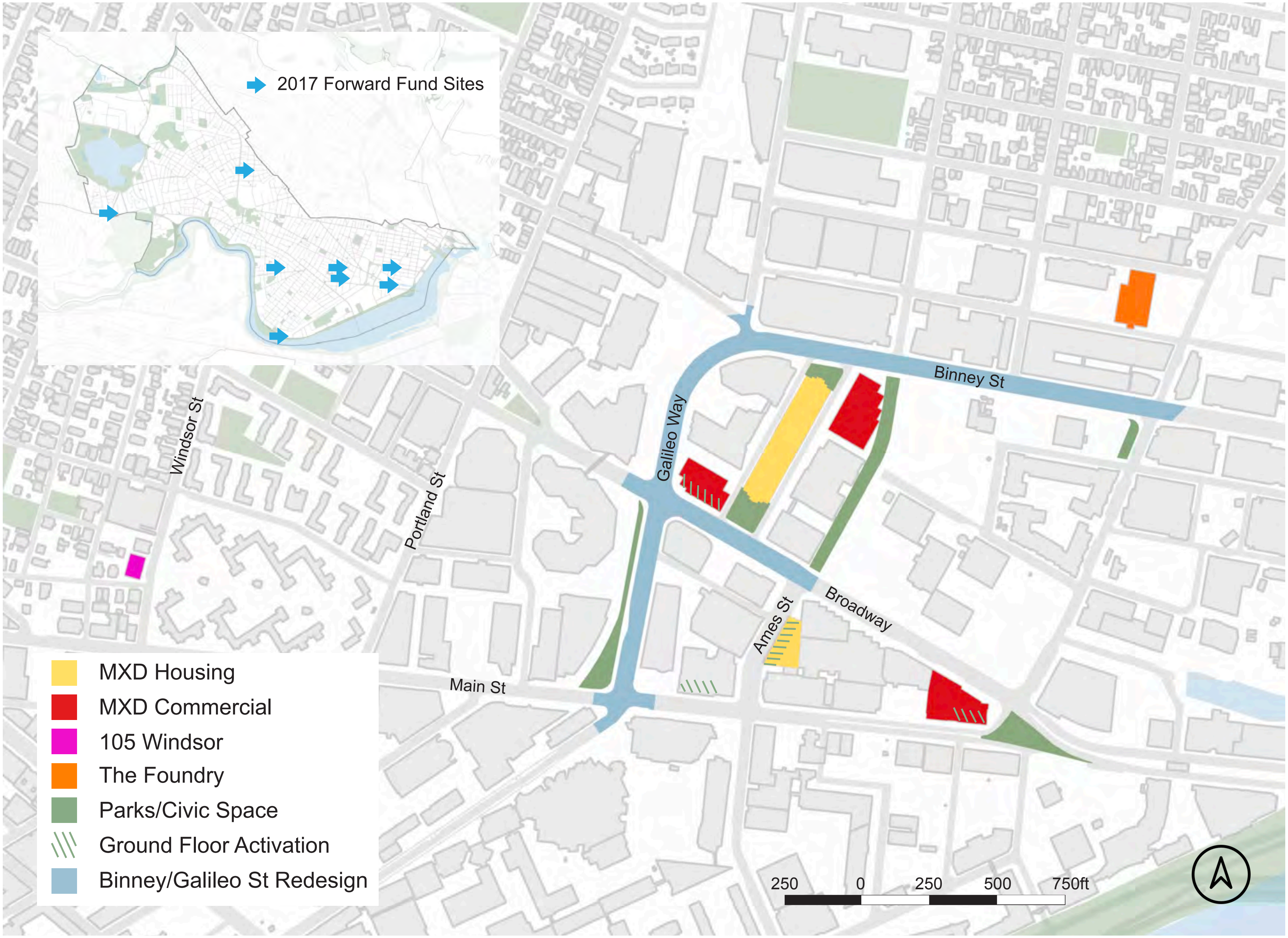
BxP advanced design drawings for improvements to the Loughrey Walkway as an early phase public realm enhancement under the IDCP. The project will install a new bike path, provide upgrades to lighting, seating, and pavement while supporting the long-term care of the oak trees.

The CRA continued planning efforts to enhance active ground floor uses in the MXD. The CRA's Design Review committee reviewed proposals from the Broad Institute for a new DNAtrium on Main Street, and worked with BxP to plan for new retail space in 255 Main Street as proposed in the IDCP. 255 Main Street's space will comply with MXD zoning language related to creating spaces for entrepreneurial retail businesses.

The CRA Board Chair and staff participated in the City's Volpe Working Group sessions. The CRA owns property on several sides of the Volpe redevelopment including 3rd & Binney, and Loughrey Way. The CRA worked with MIT to address issues related to those parcels, including protecting the oak trees on Loughrey Way.

The CRA assisted CDD in resolving technical infrastructure issues for Binney Street Park as the open space design evolved in 2017.

The overall livability and identity of Kendall Square strengthens each year. The CRA continues to encourage placemaking efforts including public space programming and banner installations.


2017 Forward Fund Sites
Binney St
Galileo Way
Windsor St
Portland St
Broadway
Ames St
Main St
MXD Housing
MXD Commercial
105 Windsor
The Foundry
Parks/Civic Space
Ground Floor Activation
Binney/Galileo St Redesign
250
0
250
500
750ft

This Page
LEFT / CRA Tour of 88 Ames Construction
RIGHT / 145 Broadway Ground Breaking

Opposite Page
145 Broadway Construction

88 Ames & 145 Broadway

Construction progress at the 88 Ames Street residential building (marketed as Proto) accelerated throughout 2017. Proto will deliver 280 units of housing including 36 affordable units, ground floor cafe space and casual dining retail. In November, the CRA Board voted to allow commercial bank space on the second floor.

The CRA approved a signage package for the building and for a temporary Proto leasing office in the lobby of 90 Broadway for the first half of 2018. The CRA also worked with Boston Properties to advance final design details of the bicycle facility in Pioneer Way and to facilitate modifications requested by the City to add dedicated bus stops for the MBTA CT2 and EZRide buses on both sides of Ames Street. These modifications will take several minutes off the MBTA CT2 route time during high traffic hours.

The CRA and Planning Board approved the schematic design for the 145 Broadway building which will become Akamai's new global headquarters. The CRA reviewed design development drawings in March, construction drawings in July, and a separate signage package in October. A visual mock up was installed in the summer to allow for review of the façade materials and their relationship to one another.

The building at 11 Cambridge Center was vacated and demolished in the spring with contractor mobilization and site prep work starting soon after. The project is using a faster construction method called "up-down", which began with slurry wall construction lasting most of the summer and fall. Excavation for the underground garage and installation of two tower cranes began at the end of 2017.

The CRA and Boston Properties worked together throughout 2017 to explore how to implement the below market-rate innovation space requirements, associated with the 145 Broadway project within the 255 Main Street building. CRA staff visited a number of innovation spaces across the metro area to learn about how local residents are being connected to the Boston region innovation economy, and what needs are still unmet.



Park Management

Grand Junction Park
Grand Junction Park celebrated a full year of being open to the community. The park and multi-use path have become a destination for visitors who desire a place to sit down, enjoy their lunch, and observe the non-stop action of Kendall Square. The 14-foot wide shared-use path has also become a popular travel route for bikes and pedestrians.

CRA staff have worked with its landscape contractor to develop a maintenance schedule that has allowed the park's trees, rose garden, and sitting areas to continue to remain comfortable and inviting.

Unfortunately, the park season ended with unplanned construction performed by Veolia Energy. In order to perform condensate pipe replacement and steam service upgrades, a portion of the park had to be closed and trench work undertaken. The CRA was able to take advantage of this project to add and improve landscaping for part of the park, to be completed in spring of 2018.

Galaxy Park
The plantings for the redesigned Galaxy Park were installed in early spring. It once again has become a well used respite and meeting spot. Innovators for Purpose, a recipient of a Forward Fund Grant, designed a walking tour marker to be installed on the park. The project's designs were presented to the CRA Board in December, and once installed will help to further activate the space.

***Loughrey Walkway** (6th Street Walkway)*
Throughout 2017, CRA staff held planning and design discussions with Boston Properties for the upcoming Loughrey Way Bike Path. Staff oversaw significant site condition testing of the existing tree health, walkway and lighting infrastructure. The Bike Path, scheduled to begin construction in the spring of 2018, will be a great addition to the heavily traveled pedestrian walkway.

Octahedron
In December, the CRA Board authorized the disposal of the Octahedron Sculpture due to the artwork's state of deterioration. Removal of the artwork from the future Binney Park was consistent with the CRA's deaccession policy approved by the Board in January.

This Page
TOP / People enjoying the shade canopies on Parcel 6
BOTTOM / Totem Artists from the Community Art Center . *Photo Credit: Community Art Center*

Opposite Page
LEFT / Grand Junction Park in the summer.
CENTER / Galaxy Park at night
RIGHT / Loughrey Walkway

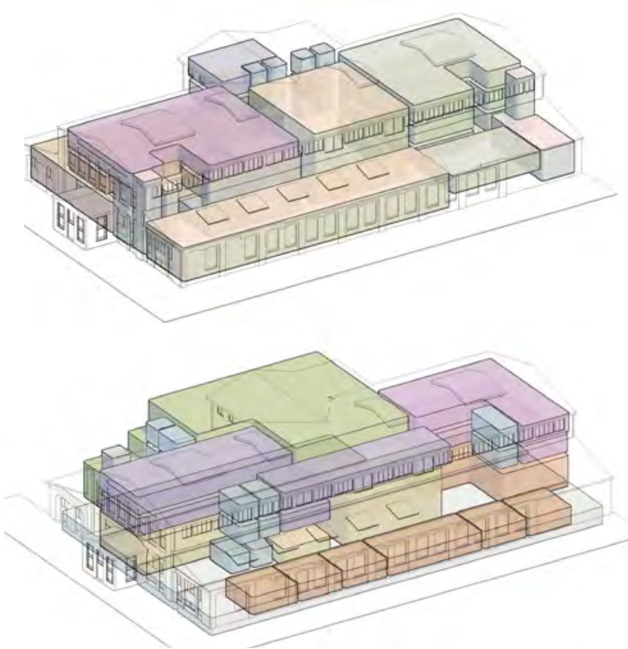
Parcel Six

The popularity of the 3rd and Binney Food Truck Program encouraged the CRA to start the program in April, two months earlier than the previous year, and extend operations into winter. Vendors provided assorted offerings of Middle Eastern, Caribbean, and Asian-American Fusion cuisine. Eleven selected vendors operated from the spring through the winter.

In 2017, the CRA partnered with many organizations that helped attract a diverse group of visitors to the parcel. A new feature was three raised garden boxes, built by Green City Growers (GCG) for the Community Charter School of Cambridge. The boxes and the associated garden program were sponsored by Boston Properties. During the school year, students visited the site and learned urban farming skills from instructors provided by GCG. Produce from the gardens was sold at a farmers market.

CRA staff also partnered with the Community Art Center by dedicating space in the park to be used for the My Totem Project. The project allowed students to explore identity, family, and community through the creation of their own personal "totem poles" which were installed along the fence.

Other improvements to the space were the addition of a Hubway station and a shade canopy. CRA staff will continue to build community partnerships and add services that foster sustained activation to this popular civic space in Kendall Square.



The Foundry

In response to community input, the CRA and City revisited the redevelopment strategy for the Foundry Building. After ending the first procurement process in late 2016, the CRA explored how to undertake the rehabilitation of the Foundry Building as a publicly funded capital project with a separate procurement process to select an operator and master tenant.

The CRA and the City crafted a strategy that will better ensure the building will be accessible, be open to the public, and be able to fulfill its mission to be a collaborative and creative space for the Cambridge community. The CRA conducted conceptual design studies, cost estimates, financial feasibility analyses, and led a renewed public engagement process. CRA staff also organized three Foundry Advisory Council (FAC) meetings to guide the redevelopment process.

Over the second half of the year, the CRA worked diligently to amend and revise the Foundry governing documents to move the project forward. These included the Foundry Demonstration Plan, approved unanimously by the Cambridge City Council in September, and the amended Lease and Cooperation Agreement in December. The Cooperation Agreement specifies roles and responsibilities for the CRA and the City during the design, construction and operating processes under the revised redevelopment strategy.

To better understand the role of an operator entity for the Foundry, the CRA organized community meetings with Cambridge residents and stakeholders and visited a number of facilities with similar operating principles or programs in the region. The CRA also released a Request for Information (RFI) in August to elicit feedback from organizations and individuals with experience operating buildings like the Foundry. The CRA was pleased to receive 13 thoughtful responses. Follow-up interviews helped the CRA draft the Request for Proposals (RFP) for an operator.

Working in parallel with the CRA, the City released their Request for Qualifications (RFQ) for a designer in October, receiving 19 responses in November. Two CRA staff sit on the selection committee. The final selection of a designer team was made in early 2018.

This Page
105 Windsor St - The old Boardman School

Opposite Page
LEFT/ Studies of Foundry Spatial Layout by HMFH
CENTER / The Foundry Lobby Entrance added in 1981
RIGHT / The Foundry Building circa the 1950's

105 Windsor

In 2017, the CRA stepped up its efforts to work with the City, the Cambridge Health Alliance and The Port neighborhood toward revitalizing the historic Boardman School Building at 105 Windsor Street.

In June, the CRA submitted an application for Community Preservation Act (CPA) funds in the amount of $255,000 for exterior renovations of the historic building. These funds will go toward the preservation of the property through an envelope restoration project. The renovations will include improvements to major components of the building including roof, exterior masonry, windows, and additional site work. These exterior renovations will be scheduled in 2018 separately from interior renovation work.

The CRA has entered into a contract with Daedalus Projects, Inc. to function as an owner's representative to assist CRA staff on this project.

The CRA has continued to have discussions with City staff and representatives from non-profit organizations serving the Port, regarding how CRA staff can best assist with the planning process for interior improvements and future uses for the property to best serve the community.

Just-A-Start

On November 22, the CRA finalized agreements with Just-A-Start (JAS) for a $540,000 affordable housing loan. The loan is a part of a larger multi-building consolidation project by JAS to refinance ten of their affordable housing properties. The CRA loan will pay for the installation of fire suppression systems in 46 residential units.

The restructuring will give JAS access to new resources to reinvest in their properties, while also assisting in the reconstruction of 50 York Street, which was lost in the fire in December 2016. That project broke ground in October at an event attended by CRA staff and Board members.

This Page
LEFT / Moses Youth Center Vertical Garden
RIGHT / Cambridge Street Holiday Decorations

Opposite Page
LEFT / Innovators for Purpose Looking Glass design for Galaxy Park
CENTER / Ribbon Cutting at the Cambridge Community Center
RIGHT / Designs for Fort Agassiz

Forward Fund

The Forward Fund (FF) is a grant program to support specific physical improvement projects that better Cambridge's built environment for the benefit of all the City's residents, workers, and visitors. The Fund's goals are to:

- Advance the CRA's mission to implement creative initiatives that promote social equity and a balanced economic system
- Support innovative proposals that craft resourceful projects to take advantage of local knowledge in order to maximize potential benefits

For 2017, the theme for the FF was "Connections within Cambridge". The CRA allocated $125,000 to ten awardees, in four experimentation grants and six infrastructure grants, with one project being continued from the previous year.

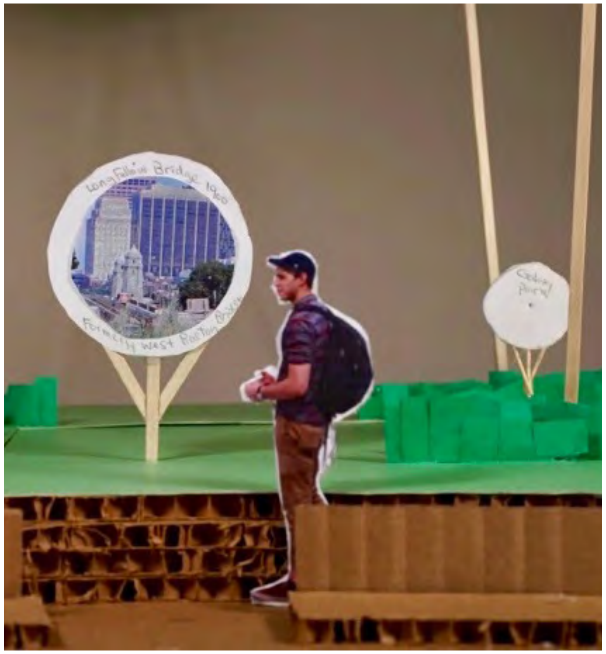
Experimentation Grants

1. Tunnel of Light
Friends of the Greenway, Inc.
This grant will fund the enhancement of an abandoned rail tunnel along the future Cambridge-Watertown Greenway Path. The tunnel will be used as an outdoor performance space equipped with sound, lighting, and staging infrastructure.

2. Wayfinders - The Looking Glass
Innovators for Purpose (IFP)
IFP youth designed a walking tour marker to be installed in Galaxy Park. Their "Looking Glass" sculpture will encourage visitors to gaze into the past towards the Longfellow Bridge and, in the opposite direction, into the future developing in Kendall Square.

3. Moses Youth Center Vertical Garden
Carolyn L. Arts
Participants in the Boys II Men program at the Moses Youth Center built a vertical garden to enhance the entrance of the center. The garden provides social, aesthetic and ecological benefits to the neighborhood. The vertical garden was made from recycled material and is planted with ingredients to be used in cooking classes.

4. Suitsculptures/Spacewalk Kendall
ROLO
This art project will allow visitors to step into an alternate history and imagine themselves participating in NASA programs had they remained in Kendall. Two space suit sculptures will be constructed, one standing and one seated, for public interaction.



Infrastructure Grants

1. Cambridge Street Beautification
   East Cambridge Business Association (ECBA)

To beautify and create a visual identity for the Cambridge Street business corridor, the ECBA enhanced the streetscape. In the spring and summer they decorated Cambridge Street with hanging flower baskets and flags. During the fall and winter, they decorated the corridor with locally produced hanging evergreen baskets.

2. Fort Agassiz Annex
   Agassiz Baldwin Community (ABC)

This grant helped ABC repair and expand their play structure. Many neighborhood families use the backyard playground and the expansion allowed ABC to meet user demands. ABC youth collaborated with peers, younger students, program staff, professional architects, and carpenters to complete the final product. The expanded structure has become an inviting gathering and play space for the community.

3. Building Pillar 1: Child & Teen Services
   Margaret Fuller Neighborhood House (MFNH)

MFNH used their funds for the first phase of their agency-wide capital improvement project to better serve their neighbors and the public. The award assisted in space design upgrades for their child care program, including plumbing, electrical, and life safety repairs.

4. Port Kiosk
   Community Art Center (CAC)

The Port Kiosk is a past awardee of a FF Planning and Design Grant. The 2017 grant will allow the CAC to complete the construction of the kiosk. Standing 9′ 7″ tall, the hand shaped kiosk will symbolize the people of the Port and their shared values of community, friendship, and mutual help.

5. Building Modernization Project
   Cambridge Community Center (CCC)

Outdated computer equipment had limited the CCC from advancing STEAM programming for children. The FF grant, in partnership with Capital One and Heart of America, enabled the CCC to renovate and modernize their lab with improvements to the space, as well as adding new computers and audio visual equipment.

6. Magazine Beach Public Boat Dock
   Cambridgeport Neighborhood Association

This project was a continuation from 2016, to create a public ADA-accessible canoe/kayak launch at Magazine Beach.

This Page
Binney/Galileo/Broadway Streetscape Design Area, with a draft-proposed street view of Binney Street between 5th and 6th Street.

Transportation

2017 was an active planning year for the CRA with respect to transportation. The CRA's Binney/Galileo/Broadway redesign of one mile of streets and intersections in Kendall Square progressed significantly with close collaboration among City departments. The first draft of 25% drawings was completed by the end of the year. The project will introduce the first bicycle-protected intersection in Cambridge, new raised protected cycle tracks, and the addition of green space and amenities to the streetscape.

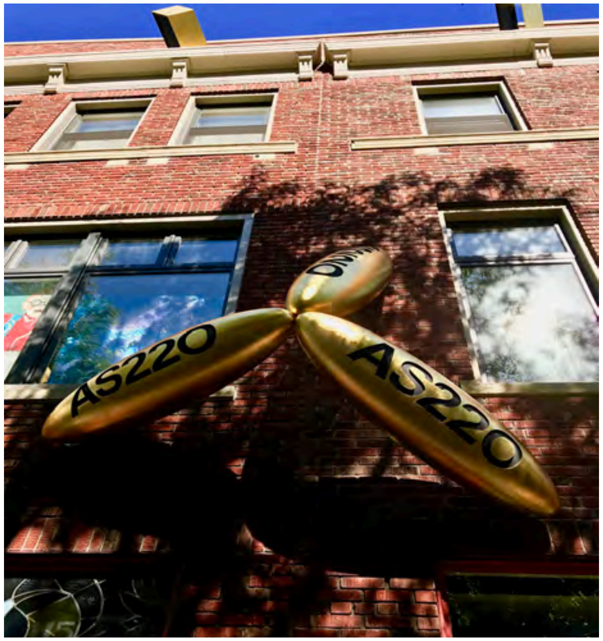
The Kendall Square Mobility Task Force (KSMTF) issued its final report in the second half of 2017. This included a preliminary feasibility analysis for MBTA and EZ Ride bus route modifications and solidified a feasible Grand Junction Rail-with-Trail cross section. The CRA led a process to solicit bids and select a graphic design team to take the technical KSMTF report and transform it into an intuitive public-facing summary report with accompanying website. This will be used by CRA, City and KSA members to help communicate the importance of this transportation vision to the public, employees, key decision makers, and funders.

CRA staff continue to work closely on an interdepartmental City working group to coordinate implementation of the Grand Junction Path. The group has been focusing on surveys, future trail design, and an overlay zoning proposal for the Grand Junction railroad corridor. The CRA has worked with the City and the KSA to promote the planning for future transit service along the right-of-way.

The Kendall Square Transit Enhancement Program (KSTEP) was finalized in 2017 as one of the first programmatic development fees for public transit in Massachusetts. The CRA worked with the City of Cambridge and the MBTA/MassDOT to develop a governance document in order to begin the program in 2018.

The CRA developed a presentation for employees in Kendall Square to better educate and facilitate conversation about transportation planning in the area. The first presentation was to Akamai employees in the fall.

CRA staff attended the National Association of City Transportation Officials (NACTO) Transit Roadshow conference in Cambridge. The conference offered expertise from planners from Seattle and San Francisco who implemented bus priority treatments and bus rapid transit in their cities.



LEFT / AS220 in Providence, RI
RIGHT / Reviewing building plans at the 145 Broadway ground breaking

Outreach & Learning

The CRA conducted a significant amount of community engagement to craft the revised redevelopment approach for the Foundry. The CRA facilitated community workshops and presentations as well as an online forum through coUrbanize. The CRA held meetings to receive input from the Foundry Advisory Committee and focused sessions on theater and workforce development needs. Staff also toured multiple facilities throughout the region.

The CRA staff have taken part in individual and organizational staff development. Staff have attended conferences of the International Downtown Association, the Grant Makers in the Arts, National Association of Industrial and Office Properties, and Urban Land Institute events. Internally, every staff member participated in a Gallup Strength Finder evaluation along with a facilitated discussion of the team's results. These tools will allow the staff to customize its collective work flow and individual professional development needs.

Staff remain highly active in the Kendall Square Association (KSA) and participate regularly in the events of the Chamber of Commerce and the East Cambridge Business Association.

CRA Executive Director Tom Evans continues his co-chair seat of the Transportation Committee. He serves on both the Kendall Square Mobility Task Force (KSMTF) and the STEAM Advisory Committee. Mr. Evans also agreed to a temporary appointment to the Transportation 4 Massachusetts Board. CRA Project Director Jason Zogg was appointed to the IDA's Top Issues Council on Urban Transit.

Internal Operations

To help manage the various redevelopment projects of the CRA, Alexandra Levering was hired in August, increasing the staff to five full-time employees. The CRA also employed an intern from Harvard in the first quarter of the year to assist with the Foundry and Windsor Street projects. As participants in the Mayor's Youth Program, two high school students spent the summer gathering data to map the Kendall Square environment. As staff grows, leadership development and talent management practices are being analyzed to more easily accelerate change, growth and mission results.

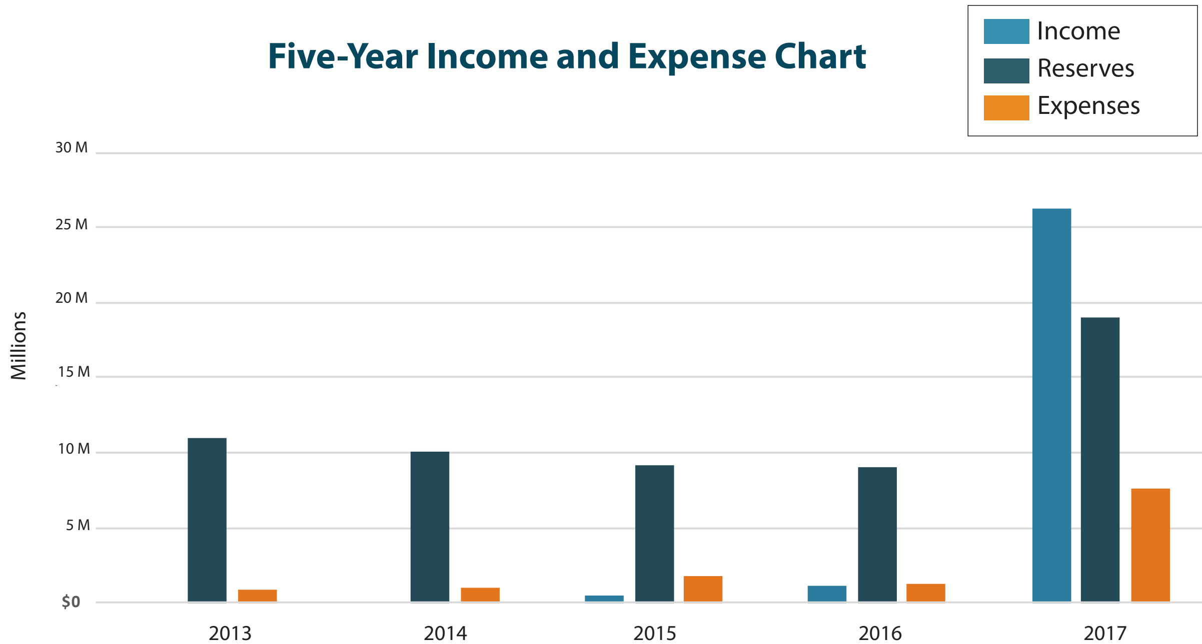
Kathleen Born was reappointed to the CRA Board for a five-year term. CRA staff and Board members are also involved in Cambridge committees. Mrs. Born was an active member of the Volpe Working Group and Vice Chair Margaret Drury sits on Envision Cambridge's Alewife Working Group.

Finances

Since 2013, the CRA administration has worked towards securing the financial future of the organization. In fiscal year 2017, a strong positive net income was achieved due to $23 million generated from the sale of development rights to Boston Properties (BxP) for the first phase of new development in the MXD District. As part of the agreement with BxP, another $3 million was received towards the Kendall Square Transportation Enhancement Program (KSTEP) which is being held in a separate KSTEP fund account. A small percentage of the CRA's income came from selling access rights to CRA-owned land to various utility and construction companies for their purposes of maintenance and staging. In addition, the Parcel 6 Food Truck Program earned approximately $17,000 which will be reinvested in the civic space.

The CRA Board voted to utilize environmental, social and corporate governance (ESG) screening investment strategies for all its investment accounts. The CRA also achieved its goal of transferring funds of matured CDs, held at numerous individual banking institutions, into its managed investment portfolios.

With the Board's approval, the CRA investment policy was modified to a slightly more aggressive, yet still very conservative, mix of 30% equity and 70% fixed income. The CRA expects to cover a large portion of its operating expenses with the interest and dividend income generated by its expanded investment account with Morgan Stanley. The CRA also contracted with Cambridge Trust Wealth Management to invest and oversee the funds for the KSTEP and Foundry projects.



Major operating expenses in 2017 include salaries and fringe benefits for employees/retirees, legal services and office rent. The $540,000 affordable housing rehabilitation loan to Just-A-Start for the addition of fire suppression systems in renovated buildings in the Wellington-Harrington Project Area was the largest program investment, followed by the Forward Fund and consultant work on the Foundry and Binney Street projects.

The CRA matched the $3 million BxP contribution to the KSTEP fund making the total of the fund to date $6 million. The 2017 Forward Fund distributed $65,000 to various non-profits community groups across the City of Cambridge, supporting physical improvement projects that better Cambridge's built environment. The CRA also moved $9 million into a separate fund for the redevelopment of the Foundry building.

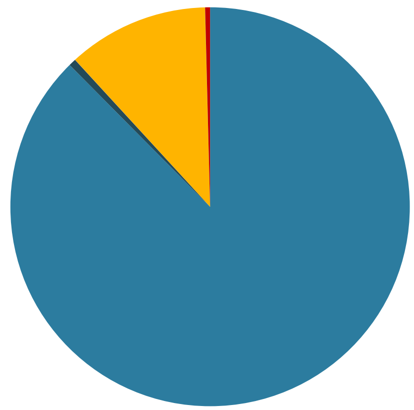
The CRA audit for 2016 by Roselli, Clark & Associates found no significant areas of accounting function requiring corrective action.

In accordance with the 2016 amendment to the State Legislature MGL Chapter 30B, the CRA's procurement threshold for the three-party solicitation of bids or proposals for both professional contracts and construction was raised to $50,000.

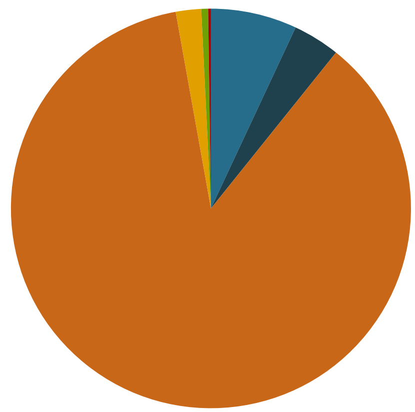
The CRA established its OPEB Trust and continued deposits into the fund. A third party accounting firm continues to provide comptroller duties as well as assist with the bookkeeping complexities that have arisen with the KSTEP and the Foundry funds.

2017 Operating Expenses and Budget*

	Budget	Actual
INCOME		
Sale of Dev. Rights	$23,043,079	$23,043,079
Investment Income	$146,000	$156,000
Reimbursements	$2,000	$2,977
KSTEP Fiscal Agent	$3,000,000	$3,000,000
Rentals	$15,000	$104,637
Total Income	**$26,206,079**	**$26,303,693**



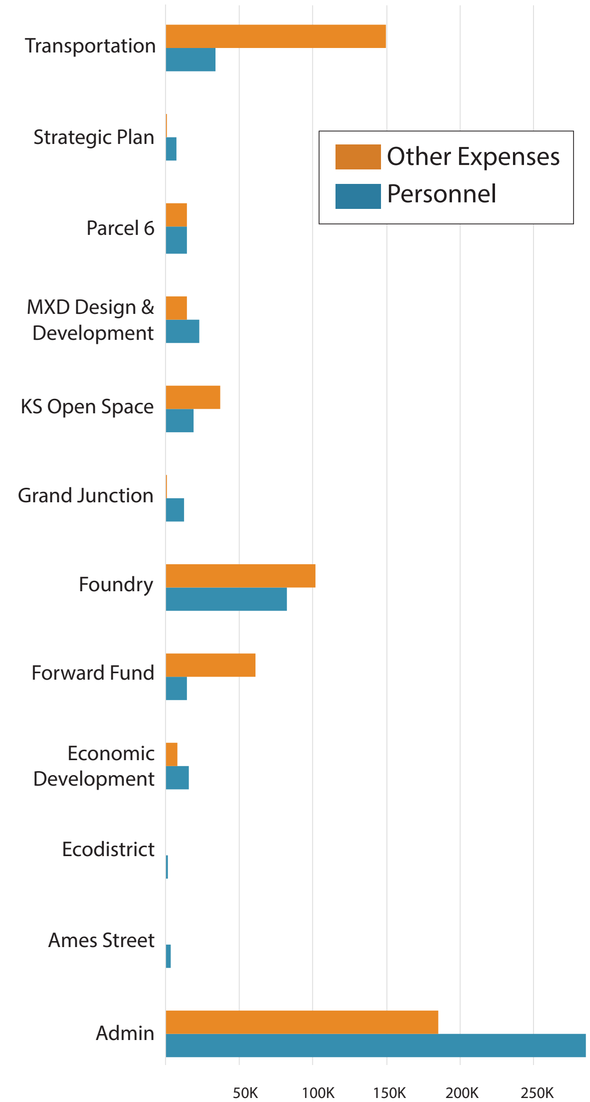
	Budget	Actual
EXPENSES		
Personnel	$683,906	$532,492
Professional Services	$635,500	$290,019
Redevelopment Investments	$6,785,000	$6,612,934
Office Administration	$154,200	$156,786
Property Management	$83,000	$42,338
Outreach & Professional Dev.	$41,200	$16,981
Total Expenses	**$8,382,806**	**$7,651,550**



	Budget	Actual
NET INCOME	**$17,823,273**	**$18,652,143**

CASH RESERVES, STOCKS, CDs, BONDS	**$18,952,831**
OPEB	**$15,510**
KSTEP	**$6,000,000**
FOUNDRY	**$9,000,000**

PROJECT BUDGET ANALYSIS



* Unaudited financials

2018 Priorities

With the approval of the Kendall Center Infill Development Concept Plan and Development Agreement, the CRA heads into a new phase of implementation work within the KSURP. The CRA is looking to expand its investments into other neighborhoods of the City. CRA staff have set forth an initial set of priorities for the upcoming year. At the same time, the CRA will use 2018 as an opportunity to align its Strategic Plan with the City's Envision Cambridge implementation priorities, potentially adapting its work plan for the year.

To stay informed and be involved please visit www.cambridgeredevelopment.org

Finalize Foundry Program Development & Design

Rehabilitate 105 Windsor Street Façade

Complete 88 Ames Street Residences

Launch Innovation Opportunity Space

Complete Improvements to Grand Junction Path and Loughrey Walkway

Diversify Forward Fund Grant-making

Select Short-term KSTEP Projects

Streamline Records Management

Document Kendall Open Space and Development

Study Feasibility of New Redevelopment Projects

Continued execution of the KSURP, IDCP and Kendall Implementation Plans

CAMBRIDGE
REDEVELOPMENT
AUTHORITY

P 617-492-6800 | F 617-492-6804
255 Main Street | 4th Floor | Cambridge, MA 02142
cambridgeredevelopment.org

MEMO

Date: February 14th, 2018
RE: New Database and Webpage - Privately Owned Public Spaces in the Kendall Square MXD
To: CRA Board
From: Alexandra Levering

There are a number of privately-owned but publically accessible open spaces and easements in the MXD district of the Kendall Square Urban Renewal Plan. Since the 1980s, these spaces have been set aside for public benefit through development, maintenance agreements, easements or covenants. To identify and publicize these spaces, the Cambridge Redevelopment Authority (CRA) has developed a webpage (www.cambridgeredevelopment.org/pops) to locate and detail each space, providing information regarding ownership, hours of operation, covenant expiration, links to original documents and amenities, including accessibility, vegetation and seating. The CRA intends for this page to be easy to use, informative, increase transparency in the development process, and promote greater use of the public spaces.

A number of cities in the U.S. have already inventoried their privately owned public spaces (POPS). Notably, Seattle, San Francisco and New York City have developed comprehensive POPS websites and implemented signage to advertise public accessibility. In Cambridge, the Community Development Department (CDD) has developed an inventory of privately owned public spaces granted through special permits, and refers to the CRA's home page for more detailed information regarding agreements in the MXD. This webpage will now complement CDD's page. The next phase of this project will be to create a uniform signage program in cooperation with Boston Properties and CDD similar to POPS programs in other cities.

CAMBRIDGE REDEVELOPMENT AUTHORITY

Parcel Six Update

February 14, 2018

2018 Vending Program

The CRA received a total of 17 submissions for the 2018 3rd & Binney Mobile Vending Program. The majority of the submissions have been entrée trucks with only three submissions from dedicated dessert vendors. The types of cuisines that will be made available to the visitors during the season will vary in choices from Latin America, Asian, Indian, and the Middle East. Gourmet pizzas and craft burgers have also been proposed.

The selection criteria, which staff used to determine the 2018 vendors, ranged from the types of foods offered, customer reviews, social media presence, and most importantly the days and times proposed. CRA staff has proposed a schedule that will include no more than two trucks and a food cart (or trike) on site on any given day of the week. Based on the vendors proposed times, the vending hours will be between 10:30 AM and 4:00 PM, Monday through Friday, although vendors will have the option to extend operating hours to 9:00 PM.

Vendors will launch the 2018 season on Monday, April 2nd. Although the application period ended on February 9th, interested vendors are still encouraged to submit proposals these will be kept on file. Vendors will be notified if a space in the program becomes free. The 2018 program will continue throughout the summer and fall, with an end date of November 16, 2018.

Garden Program

The CRA has again partnered with the Community Charter School of Cambridge (CCSC), Boston Properties (BP), and Green City Growers (GCG) to provide a multidisciplinary gardening program on the site. GCG, a Somerville-based urban farming company, will provide the opportunity to learn gardening and entrepreneurial skills to a new team of students from CCSC, while activating the space and generating interest from the public on the importance of urban agriculture. BP will provide the funding for the garden program. The garden program signage has remained on the site throughout the year which has helped provide information about the program and program partners, allowing the public to understand the full impact of the garden.

Spring Clean Up

Weather permitting, the space is scheduled for its annual spring-cleaning during the week of March 26th. Brightview Landscaping will continue the duties of landscape maintenance for the site and all other CRA-owned parks. The work scheduled will include, but is not limited to:

- Compacting the existing stone dust
- Cleaning the flower beds of all leaves and winter debris

- Pruning broken or damaged shrubs
- Edging the mulch bed
- Trimming the ornamental grasses
- Installing the shade canopy

Biweekly maintenance of the space is scheduled to continue throughout the season or on an as needed basis.

THE FOUNDRY BUILDING | 101 Rogers Street, Cambridge, MA | January 25th, 2018

BUILDING OPERATOR REQUEST FOR PROPOSALS

Responses due: March 8th, 2018

CAMBRIDGE
REDEVELOPMENT
AUTHORITY

TABLE OF CONTENTS

The Foundry Building at 101 Rogers Street, Cambridge, Massachusetts

1.0 PROJECT NOTICE

The Cambridge Redevelopment Authority (CRA), in consultation with the City of Cambridge (City), is issuing this Operator Request for Proposals (RFP) to select a master tenant to occupy, activate, program, and maintain the City-Owned building known as the Foundry at 101 Rogers Street in Cambridge, Massachusetts (the "Foundry" or the "Property"). Respondents will compete for designation as the operator and master tenant of the Property (the "Operator"), based on the strength of their experience and proposals to fulfill the vision for the Foundry. This RFP is being issued consistent with the Foundry Demonstration Project Plan pursuant to M.G.L. Chapter 121B § 46(f).

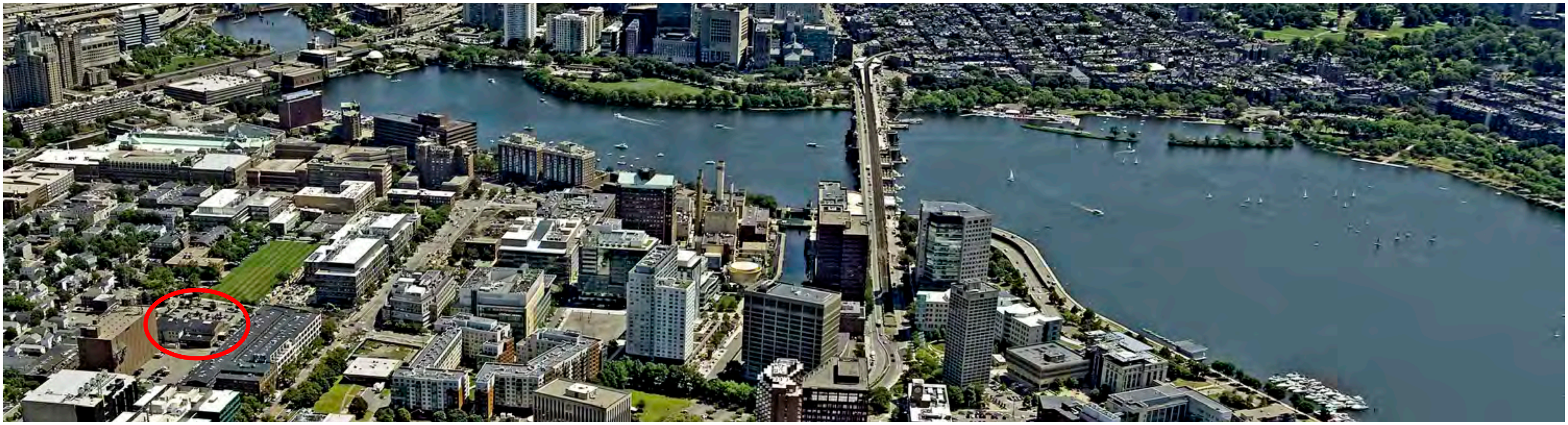
The CRA seeks to partner with an Operator with experience, creativity, and capability to manage the Foundry as a self-sustaining and thriving, innovative center that offers a collaborative environment and space for visual and performing arts, entrepreneurship, technology and workforce education. The project will require expertise of an Operator to curate a variety of creative non-profit, community, and market-rate programs that can coexist and interact within the approximately 50,000 square foot building. The Operator, subject to a master lease agreement with the CRA, is expected to perform three major roles: property management, program management, and outreach to potential tenants, for an initial term of five years.

Procurement Deadlines

Issue RFP	January 25th, 2018
Information Session & Tour	February 7th, 2018
Questions Due	February 15th, 2018
RFP Responses Due	March 8th, 2018

RFP responses are due on 3/8/2018 no later than 4:00 pm.

Address: Thomas Evans, Executive Director
Cambridge Redevelopment Authority
255 Main Street, 8th floor, Cambridge, MA 02142
Phone: 617-492-6800
foundry@cambridgeredevelopment.org



The Foundry is in East Cambridge close to Kendall Square, Boston, and the Charles River.

2.0 OVERVIEW OF THE RFP

The purpose of the RFP selection process is to review each submittal in detail to evaluate the proposed programmatic approach, the viability of the business and staffing plans, and the experience of the responder(s) to ensure that the Foundry will achieve the public policy goals laid out in the Foundry Building Demonstration Project Plan and the City-CRA Lease and Cooperation Agreement (the "Governing Documents"), available on the CRA website.

The CRA will host a non-mandatory Information Session and Tour at the Foundry Building on February 7th, 2018, at 10:00AM. The Information Session will be an opportunity to ask specific questions of CRA and City staff and to tour the building. Please note that the building is not ADA compliant.

All inquiries concerning this RFP must be addressed to the following person:

Thomas Evans, Executive Director
Cambridge Redevelopment Authority
255 Main Street, 8th floor, Cambridge, MA 02142
Phone: 617-492-6800
foundry@cambridgeredevelopment.org

Potential Responders are encouraged to register their interest in the Operator RFP to the CRA via email (foundry@cambridgeredevelopment.org).

Any addenda will be emailed to the contact on file and will also be posted on the CRA website. It is the responsibility of Responders to ensure that they obtain all information pertaining to this RFP and ensuring that they receive all addenda.

All questions must be submitted by February 15th, 2018. Responders should note that all questions, requests for clarifications and exceptions, must be submitted in writing, and e-mail is preferred. Submissions made in any other format will not be given a direct response. Answers to all questions of a substantive nature will be provided to all Responders in the form of an addendum to this RFP via email to registered Responders and posted on the CRA website at: www.cambridgeredevelopment.org/foundry.

Submissions are due on the date indicated above and must be submitted to the address above. Any response received after the time specified will be considered a late response and will be disregarded. See Section 5.0 for detailed information on submission requirements.

Information provided to the CRA in response to this RFP will become the property of the CRA and the City. The CRA does not plan to release responses for public inspection until after the Operator procurement process is finalized.

Existing interior space on the 2nd floor

3.0. PROJECT INFORMATION

Operating Mission: *The Foundry is an adaptive reuse project to build a self-sustaining center for creativity and collaboration for the Cambridge community. At the intersection of the Kendall Square Innovation District and the East Cambridge neighborhood, the Foundry building will provide space and programs for the visual and performing arts, entrepreneurship, technology, and workforce education within its historic, industrial setting. The Foundry will facilitate access for residents, especially underrepresented communities and adjacent neighborhoods, to the dynamic working and learning environment of Kendall Square.*

When redeveloped, the Foundry is expected to have approximately 50,000 gross square feet (approximately 38,500 usable square feet) on three or four floors. The historic building will be repurposed with an array of flexible spaces that can accommodate public uses, community-oriented uses, and market-rate uses, with a combination of anchor organizations, shared spaces, and shorter-term events and activities. Over time, the building's uses may adapt to meet evolving community demand.

Side yard with view from Bent Street

The City, working in concert with the CRA, will redevelop the building with the goal of renovating the building to be suitable for a wide range of activities, to create universally accessible, high quality spaces, while respecting the historic form of the original structure. On October 19, 2017, the City issued a Request for Qualifications (RFQ) for design services for the Foundry building and site. The design team is projected to develop a feasibility study in Spring 2018. The intent is to engage an Operator by the second quarter of 2018 so that the Operator will be able to collaborate with the City's design team in developing the program for this project.

In 2015, the City created a Foundry Advisory Committee (FAC), a seven-member appointed group of community representatives, to ensure that the use of the Foundry is consistent with the Project Vision and Objectives (Section 3.1). As set out in the Governing Documents, the FAC will serve as a resource to provide input to the CRA and the City regarding the building program in the design phase and throughout the operations phase.

3.1 Project Vision and Objectives

The Foundry Vision and Objectives have been informed by years of community input which strive to cover the broad range of possible uses that may be undertaken at the Foundry building throughout the life of the Project. First written into the Demonstration Plan in 2015, this overarching vision and the objectives that follow still guide the project today:

Vision

The Foundry will be a creative, innovative center that offers a collaborative environment with a mix of cultural, educational, manufacturing, and commercial uses. The renovated multipurpose building will be designed for flexibility and will be accessible, inclusive, and welcoming to the public. The activities within will be multi-generational and multicultural, providing a citywide and neighborhood resource that is financially sustainable for years to come.

Objectives

Innovative Programs:

a) Foster a center of creativity and innovation through the shared use of space populated with complementary uses that is accessible to all.

b) Create mentorship, internship, apprenticeship, workforce training, and educational programs for Cambridge residents that can directly benefit and engage the surrounding community.

c) Include significant training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) fields that can effectively introduce and prepare Cambridge residents for the existing and growing professional fields that have emerged in Kendall Square area over the past several years.

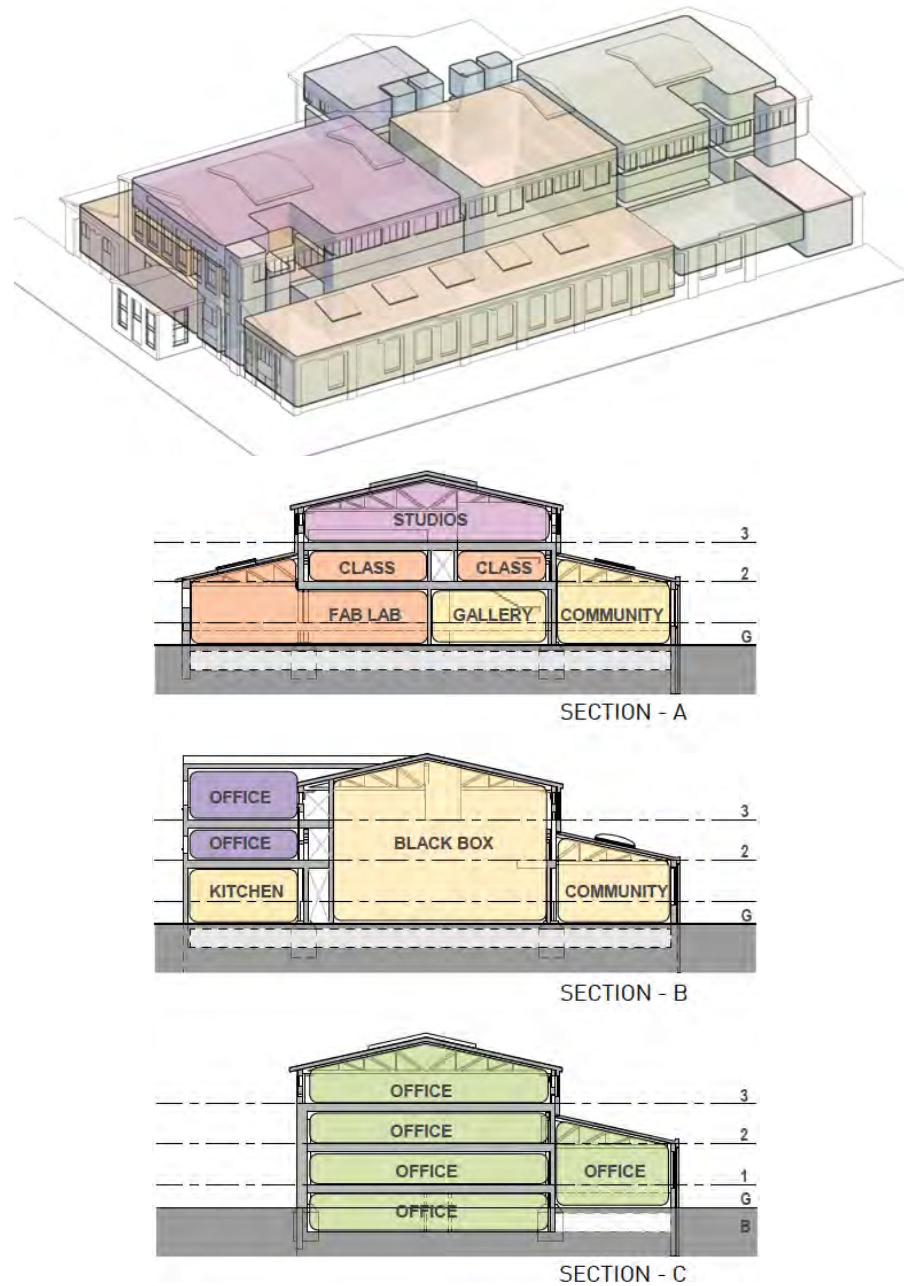
d) Capitalize on the commercial success of Kendall Square's redevelopment to create a unique collaborative environment as a citywide resource, with a diverse mix of cultural, educational, and commercial uses emphasizing youth and senior engagement, with a particular focus on under-represented, lower income households.

Building and Site Development:

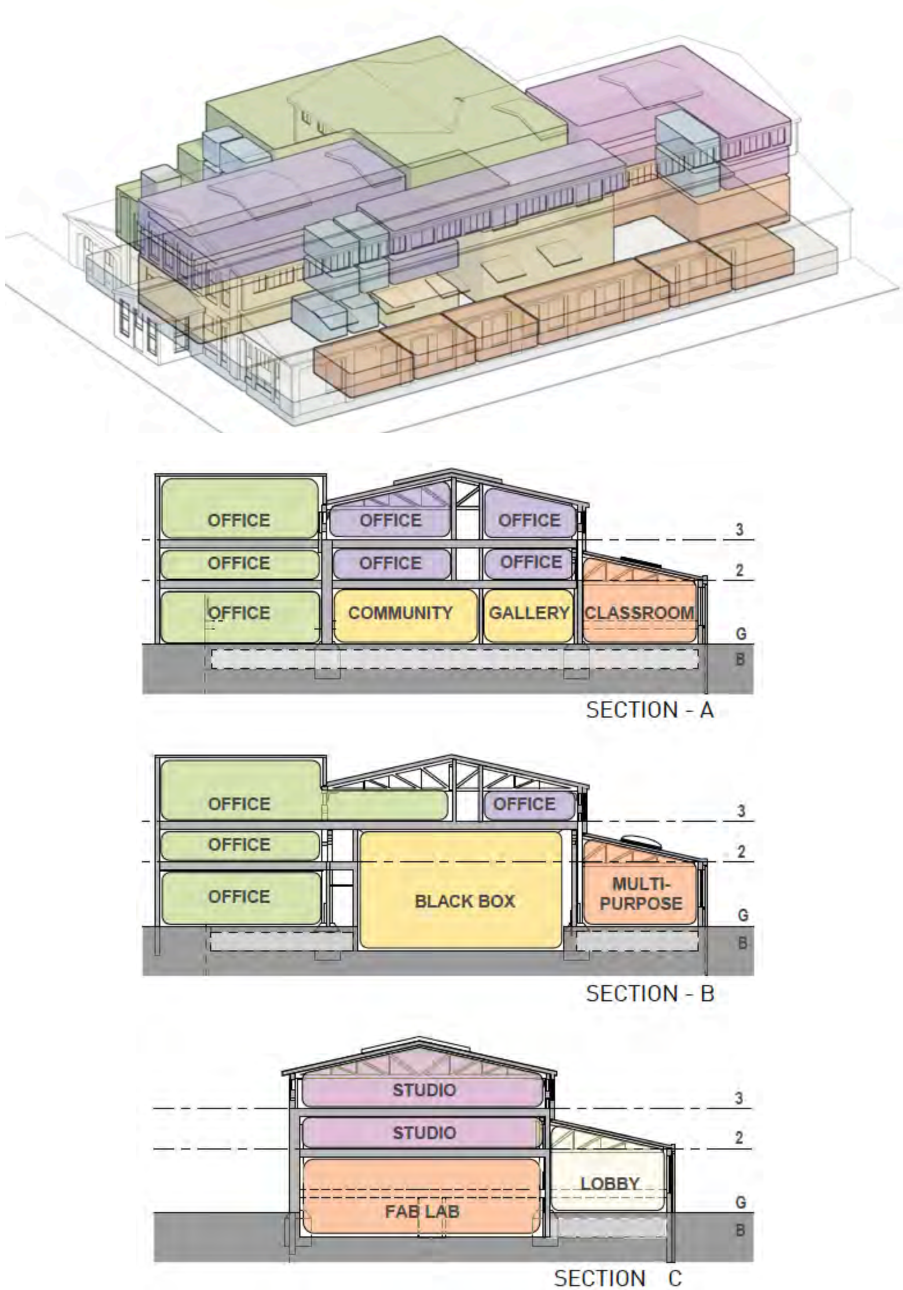
e) Create physical assets (a renovated structure, new facilities, and equipment) that will support viable economic activity and promote business growth and job creation within the Foundry in a manner that can be sustained in the years to come.

f) Bring the Foundry into productive use for the community with universal accessibility and prevent the Property from falling into disrepair.

g) Highlight the historic architectural elements of the building and connect the building to its site and surroundings, including its new streetscape.



Study of Spatial Layout - Option 1



Study of Spatial Layout - Option 2

Operational and Financial Structure:

h) Leverage multiple funding sources to provide a financially sustainable building operation, while providing space for community, cultural, and educational functions at rents commensurate with those uses.

i) Maximize the extent of public and/or community uses of the building and providing a structure for ongoing management and oversight of those uses.

j) Pilot and report techniques for the adaptive reuse of an industrial building into a center of innovation and creativity, utilizing public private partnership both as a financing tool and a model of collaborative economic and cultural development.

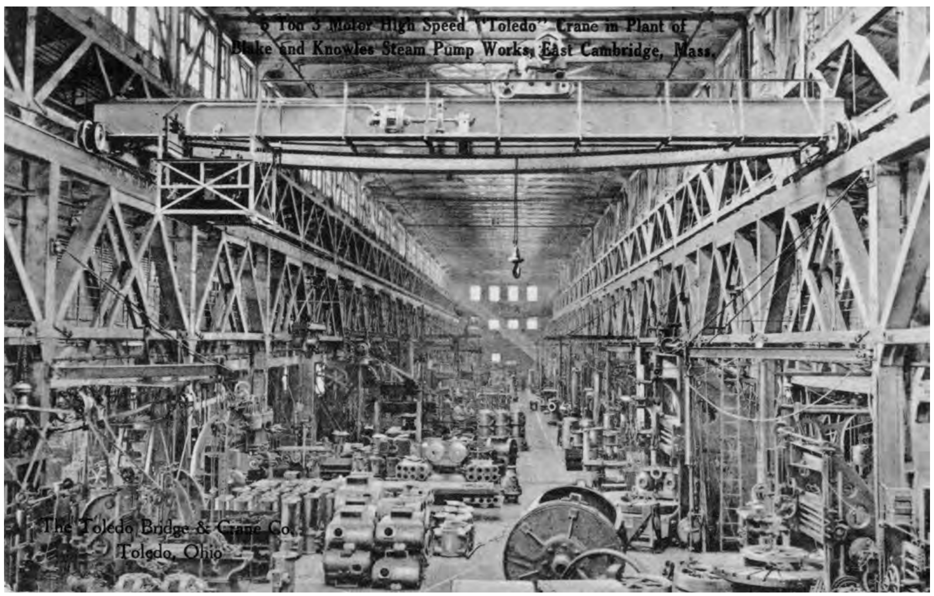
3.2 Background/Context

The Foundry is an industrial building constructed by the Blake & Knowles Steam Pump Works in 1890. The company, who once processed 50 tons of iron a day, supplied 90% of the pump supplies to the U.S. Navy in the 1930s. Since then, the Foundry has retained its historic brick and timber-framed structure, but was modified in the 1980s to accommodate office and other uses.

The building sits in between the East Cambridge residential neighborhood and Kendall Square, a leading innovation district that is home to some of the world's most visible companies in life sciences and technology. Like the area's original innovative manufacturing businesses, it continues to be a place where people invent the future through research, development, and production, from incubators to start-ups to mature firms.

In the past decade, Kendall Square has begun to flourish with a growing street life of restaurants and cafes, farmers markets, and recreational activities in nearby parks and along the Charles River. Private development has occurred not only in the center of the district around Main and Broadway, but more recently along Binney Street near the Foundry. The nearby Rogers Street Park is a significant open space that is in the process of being programmed and designed through the City initiative, Connect Kendall Square. Adjacent to the Foundry, a new residential project is under construction at 301 Third Street.

The size and location of the Foundry make it uniquely positioned to leverage the investment and innovation taking place in Kendall Square, to deliver workforce, educational, and entrepreneurship resources for underrepresented communities, while also providing needed space for the arts, nonprofit organizations and community uses.



The Main Machine Shop in East Cambridge circa 1891. The Foundry is much smaller, but originally had a similar style of construction.

3.3 Conceptual Building Program

The overall goal of the Project is to create a unique collaborative space for a variety of uses consistent with the Vision and Objectives above. The uses contemplated for the building allow for flexibility and a wide range of activities that could be incorporated into the programming concepts. Programming concepts should highlight the work of community-based non-profit organizations as well as interdisciplinary partnerships, and should incorporate workforce development opportunities for local residents wherever possible. The building should remain open and accessible to the general public, especially on the ground floor. Proper consideration should be given to ensure that uses are compatible with one another and it is expected that all tenants will contribute to the life of the building.

The programmatic scope is expected to evolve during the design process with input from the selected Operator, the Foundry Advisory Committee, and the community. An initial program, which has been discussed in recent public forums, is provided below:

Program Element	Floor Area (net square feet)
Large Community Room	3,000 sf
Classrooms / Multi-Purpose Rooms	4,000 sf
Performance Space / Black Box	3,000 sf
Workshop	3,000 sf
Art Studios	3,000 sf
Kitchen / Café	1,000 sf
Gallery	1,000 sf
Non-profit Office	5,000 sf
Market Rate Office	15,500 sf
TOTAL	**38,500 sf (net floor area)**

This program is based on considerable community outreach and discussions. The balance of uses is projected by the CRA to meet the building objective of a financially sustainable building operation, as well as other community goals. The program anticipates some anchor or resident uses complemented by a variety of shared uses.

3.4 Redevelopment Process

Building Use Program Examples: Makers space, theater, classrooms, office space, community room and art gallery.

In 2016, the CRA, working in cooperation with the City, sought development entities that would both redevelop and operate the Foundry over a fifty-year term. Following receipt of proposals, public feedback was received questioning the level of community space to be made available. These concerns caused the CRA to cancel the procurement for a private development entity.

The current redevelopment process is structured so that the City, in cooperation with the CRA, will oversee the design and construction of the capital improvements, and the CRA, with the assistance of the City, will oversee the selection of the Operator. The City will also lead the permitting processes for design and construction.

The construction projects will include a “Core and Shell Project,” which will include major capital improvements, and a “Fit-Out Project”, which will include finish and furnishing work to make the building usable for tenants. The Operator selected through this RFP process will work with the City and CRA to help define the designs, particularly the design for the Fit-Out Project.

Conceptual design section of black box with grade level entry and exposed trusses

4.0. OPERATOR ROLE AND RESPONSIBILITIES

The Operator is expected to perform three major roles: program management and outreach, property management, and sub-tenant recruitment and selection. The Operator will serve as the master tenant of the building. The Operator may be an individual or a team, as long as there is a single point of responsibility. The roles may be fulfilled through staffing, partnerships, or subcontracts. The capacity to handle these overlapping responsibilities will be critical. The Operator will need to reach out to a broad range of constituencies and organizations; create, coordinate, and schedule collaborative programming to complement other activities in the building; coordinate the building's physical management with program activities, and recruit tenants and build programmatic partnerships.

The Operator's responsibilities and legal relationship with the CRA will be memorialized in an Operator Lease, which will contain provisions that will enable the CRA continuously to oversee the operation of the Foundry and ensure that the Vision and Objectives of the project are met throughout the term of such Lease. The CRA anticipates that the initial Operator Lease will be five years in duration, with the possibility for multiple renewals. The Foundry Advisory Committee will also provide input to the CRA and the City Manager on the Project's consistency with the Plan's Vision and Objectives. The CRA may retain the role of negotiating agreements with market-rate tenants, and could retain other roles as necessary during the start-up phase. The CRA and Operator together must assure that the design and programming of the Foundry, including the allocation of space to public uses, community-oriented uses, and market-rate uses, achieves a sustainable source of revenues to fund the Operations Phase over the term of the Operator Lease.

The operations of the Foundry are intended to be self-sustaining, supported through rents, fees, and other revenue sources generated by the building. These revenues should cover all annual operational expenses such as utilities, cleaning, security, insurance, maintenance and repairs, as well as program management costs such as community outreach, daily activity coordination, special events scheduling and support, and cross collaboration initiatives.

Initial analysis by the CRA anticipates that this strategy will allow for sixty percent (60%) of the building's programmatic space to be reserved for community and public uses, with the remaining forty percent (40%) to be leased at rents at or close to market rates. It is also expected that the distribution of uses in the building will evolve as community needs, market conditions, and technology change over time.

The Operator will serve as an asset manager helping to broker and maintain sub-tenant leases. Longer-term sub-leases (one year or longer) or leases to occupy greater than a certain portion of rentable square footage in the building will be subject to the approval of the CRA, with shorter-term arrangements (less than one (1) year), to be facilitated fully by the Operator in accordance with agreed upon protocols. The CRA may occupy up to 2,000 sf in the Foundry as if it were a commercial tenant. It is expected that the Operator and program partners will have an on-site office presence as the building's master tenant.

Community engagement workshop for the Foundry

Specific areas of expertise that will help to fulfill the roles of property management, program management, and tenant selection are outlined below:

1. Develop Inclusive and Collaborative Programming. The Operator is expected to program and schedule the use of the theater, lobby/galleries, community rooms, classrooms and other shared public spaces in a way that complements other activities in the Foundry and is inclusive to the community. The Operator should create measures to encourage diverse building tenants to collaborate on activities, programs, and shared use of resources to promote the intersection of ideas.

2. Facility Oversight and Management. The Operator needs to maintain a high quality and welcoming physical environment that can accommodate a range of uses, during different times of the day, week and year. Consistent with its role as master tenant, the Operator will manage custodial, security, and hospitality functions with turnover of uses between different programs on a day-to-day and weekly basis. They will also oversee property management, tenant fit-outs and any necessary repairs and capital maintenance under $50,000.

3. Community Outreach. The Operator will need to engage various organizations and constituencies in Cambridge as the Operator develops and continuously improves the Foundry programming. Special attention should be given to attract diverse and underrepresented populations and organizations. Throughout operation, the Operator will also be expected to conduct continual outreach to attract new residents and organizations who have yet to engage with the facility or its programming partners.

4. Selection and Recruitment of Non-Profit and Market-Rate Tenants. The Operator is expected to recruit a balanced mix of tenants that will activate the building consistent with the Foundry's mission. Below market-rate tenants should be responsive to community needs, consistent with the Vision and Objectives, generate synergy among users, and provide rents that cover operating costs in combination with the market rents. The Operator is expected to manage the marketing of the Foundry and identify prospective market-rate tenants whose rent will support the operations of the building. Working in collaboration with the CRA, the Operator will seek market-rate tenants that also support the building's mission and can engage in the life of the Foundry, through events, mentorships, and other forms of program collaboration. The Operator also needs to manage turnover and communicate effectively with the CRA and FAC to ensure tenant selection and leasing agreements stay true to the Foundry mission.

5. Measurement of Operational Success. The Operator will be expected to create annual operation plans that forecast revenue, expenses, and community programs. In order to realize and track community goals for the building, the Operator will develop methods of tracking on no less than a quarterly basis the building's operational success using metrics or other indicators that show programmatic use and budget implications of the mix of uses. These reports should guide the Operator on how to plan for the following year and work with existing tenants and/or find new tenants, while sharing information with the CRA, City, and community.

Perspective of high-bay community room by HMFH Architects

5.0. SUBMISSION REQUIREMENTS

All submissions shall provide information related to the elements listed below in sufficient detail to allow an informed and fair selection process. Incomplete submissions will be rejected. A checklist is provided in Appendix 8.1 (Form C).

Submissions should be in both digital and hardcopy formats:

- Twenty (20) bound copies in 8-1/2 x 11-inch format.
- One flash drive with a digital version of the submission as a single PDF with a maximum file size of 18 MB.

All materials submitted to the CRA in response to the RFP will become the property of the CRA and the City and, unless specifically exempted, should be considered to be public records under Massachusetts law (Appendix 8.1, Form A). See Section 7.0 for additional details.

5.1 Letter of Interest

Responders must submit a letter of interest signed by the principal(s) of the Responder.

5.2 Programming Concept and Management Approach

Responders must provide a narrative description of the programming vision and approach to fulfill the Operator Roles and Responsibilities outlined in Section 4.0. The narrative should address the strategy for marketing, outreach, and community partnerships over time to achieve an inclusive space that involves a cross-section of Cambridge residents, including under-served and under-represented populations. A description of the proposed program should demonstrate how the uses and projected tenants will contribute to the life of the building including shared use and hours of operation throughout the day and evening. Approaches to property management, whether an internal or external function, should contemplate day to day transitions between uses and the role of hospitality in welcoming all members of the community. The management approach should include a strategy to coordinate and manage short term rentals and longer-term leases in cooperation with the CRA. The amount of space that the Operator, as a tenant, will need in the Foundry for their programmatic functions should be identified. Anticipated concerns, issues, or limitations should be identified with a strategy to address them.

5.3 Staffing and Organization Plan

Responders must submit a staffing and organization plan that identifies key management positions, full and part-time positions, partnerships, and independent contractors, necessary to fulfill the Operator Role and Responsibilities outlined in Section 4.0. The experience and skills of the key management positions should be provided. An organizational chart will help identify lines of responsibility and number of positions. Any needs for technical assistance, capacity building, or other support, especially before or during the first year of occupancy, should be identified.

A view of the Foundry from Rogers Street

5.4 Business Model

The CRA will allocate one million dollars ($1,000,000) to the Operation and Maintenance Account, a portion of which can support tenant recruitment before occupancy and program ramp up during the first year. The CRA will also allocate one million dollars ($1,000,000) to an Operating Reserve Fund to cover unforeseen costs in the Foundry's operations. Additionally, the CRA will create a Capital Reserve Fund. The business model presented by Respondents should demonstrate the ability to fund the Capital Reserve Fund. The Operator, working with the CRA, may also seek private donations and grants from third party sources to help support the mission of the building. The CRA is expected to review the budget with the Operator on a quarterly or annual basis.

The Operator will collect other rents and fees to support the operations, maintenance and programming of the Foundry with significant oversight by the CRA. The Operator would make ground rent payments to the CRA, which would help support the Operating Reserve Fund and the Capital Reserve Fund. The business model for the Foundry needs to demonstrate that the building will be financially self-sustaining after the first year, with the projected revenues from Community Users, Non-Profit users, market-rate tenants, third party funders and donations, and any other sources (Project Revenues) matching the expected costs of operations (Project Expenses). Project Revenues would be paid into an Operation and Maintenance Account designated by the CRA for use for the Foundry, and Project Expenses would be drawn from this same account. Sub-leases with terms over one year (or for greater than a certain portion of rentable square footage of the building) will be approved by the CRA. The CRA anticipates entering into an initial five year term, with an option of a five year extension.

Baseline Model

The Responder must provide a business model based on the conceptual building program described in Section 3.3. The business model projects a 10-year cash flow with the following information:

1. Chart of uses and/or tenants by floor area (gross and net floor area),
2. Rents and other revenue sources according to use or tenant,
3. Costs for utilities, insurance, taxes, marketing, payroll, contracted services, building repairs and maintenance, and other expected expenses,
4. Payments into the Capital Reserve Fund to cover future updates or new furnishings and finishes, which are expected every ten to twelve years,
5. Explanations regarding assumptions about net and gross floor area, vacancies, escalations, terms, lease up periods, inflation, and contingencies,
6. Expectations for management fees, performance bonuses, or other asset management incentives.

Responders should provide a description of how their proposed business model and income projections for the Foundry relate to specific types of tenant arrangements or subleases, including duration, and what part of the fit-out costs, tenant improvements, and operating expenses are expected to be paid by sub-tenants and Responder respectively. The business model should also address how the approach to curating the community uses and overall management of and integration of the proposed uses might affect the financial plan or any other aspects of the business model. The financial model must be expressed in a fixed dollar amount with appropriate escalations over a 10-year lease term.

Alternative Business Model

As an Alternative Technical Response, Responders may also submit an alternative program and coordinated business model in addition to the Baseline Model. Additional alternative structures in which market rate tenants lease space directly from the CRA may also be presented. In this case, the CRA would deposit these rents into the Foundry Operations and Maintenance Account for use by the Operator.

5.5 Experience and Qualifications

Responders must demonstrate their capacity to work with the CRA and carry out operational and program management of the Foundry building by providing information on relevant initiatives and experience, which might include:

- Creation of programs with innovative operating models and tenanting strategies, including the incorporation of uses providing a public benefit and/or a mix of market- and non-market rate tenants.
- Creation of programs focusing on arts, technology and/or workforce development.
- Negotiation of successful partnerships, including partnerships with property managers and operators, and public entities.
- Negotiation of subleases with tenants and users similar to those proposed for the Foundry Building.
- Evidence of their ability to secure tenants including any existing relationships, partnerships or collaborations, past projects, or proposed strategies.

Third Floor View of the Foundry

5.6 Letters of Support, Collaboration and/or Commitment

In order to demonstrate outreach capacity, local partnerships, and financial feasibility, Responders should provide appropriate letters from prospective tenants, funders, and program providers. It is anticipated that no one entity can successfully provide the diverse range of community programs expected by the community, thus it is anticipated that the Operator will need to form partnerships to fulfill the full scope of the Foundry's functions.

5.7 Forms

Responders must submit Form A, Policy on Release of Documents, Form B, Anti-Collusion Agreement and Form C, Submission Checklist (see Appendix 8.1).

6.0 EVALUATION AND SELECTION PROCESS

6.1 Selection Process

Evaluation of the proposal will be based on the information provided in the Responder's submission, in accordance with the requirements of this RFP, and any interviews, references, and additional information requested by the CRA. The CRA Board will select the Operator based on the recommendations of the Evaluation Committee and the input of the Foundry Advisory Committee, subject to the approval of the City Manager. The Evaluation Committee will be comprised of CRA and City staff.

Based on the Evaluation Committee's evaluation, some of the Responders may be invited for an interview. The CRA may also request additional information as part of the interview.

The Evaluation Committee will then evaluate all additional information, including any further input from the Foundry Advisory Committee, and will make a recommendation for an Operator to the CRA Board and the City Manager for their approval, respectively. The recommended Operator may be asked to present their concept publicly to the CRA Board. The CRA will notify all Responders in writing of the final decision.

6.2 Evaluation Criteria

The evaluation criteria below reflect the intent of the Project Vision and Objectives (Section 3.1) and other aspects of the Governing Documents. All factors are important and many are interrelated; proposals are expected to be responsive to all criteria. Proposals will be evaluated according to the extent the following criteria have been fulfilled.

1. Submission offers **creative ideas and an inclusive, collaborative program** to create a City-wide resource that is financially sustainable for years to come, promoting the building vision and objectives.
2. Responder demonstrates the ability to engage the community in an active and ongoing manner to create a place that is accessible, **inclusive, and welcoming** to the public in a variety of ways and times, tied to the program vision and objectives, targeting the full diversity of Cambridge, including opportunities for drop-in visits by the general public and destination activities.
3. Responder demonstrates experience and presents ideas for hosting cross-disciplinary **programs and collaboration**, with strategies to engage and maintain community involvement in the building and its programs over time.
4. Responder demonstrates experience, partnerships, or ability to build capacity in **property management**, especially its integration with program management.
5. Responder demonstrates experience, partnerships, or ability to build capacity in **tenant recruitment, selection, and retention**, with both non-profit and market-rate tenants.
6. **Program mix and allocation** maximizes benefits to the community while maintaining the financial sustainability of the property over the long term.
7. **Staffing and Organization Plan** demonstrates dedicated, qualified management personnel, committed staff resources, strong contractors and/or partnerships that will focus on the Foundry project.
8. **Business Model** demonstrates a solid understanding of non-profit and market-rate revenue rates and structures, staffing and other operational costs, and offers creative approaches or solutions where necessary.
9. Responder identifies **performance measures and reporting strategies** to keep the CRA and the public informed about the Foundry programming and community benefits.

7.0 GENERAL TERMS AND CONDITIONS FOR RFP

1. The RFP is issued to seek a real estate transaction to procure a master tenant for the Foundry, who will, in addition to occupying the Foundry, program and maintain the Foundry consistent with the Foundry Demonstration Project Plan, pursuant to M.G.L. Chapter 121B § 46(f).

2. MBE/WBE Participation. The CRA encourages the use of MBE/WBE principles and subcontractors if subcontractors are used.

3. Public Records Law. All responses and information submitted in response to this RFP are subject to the provisions of the Massachusetts Public Records Law, M.G.L. c. 66, § 10 and c. 4, §7(26) and 950 CMR 32. M.G.L. c. 4, § 7(26)(h) exempts from the definition of "public record," among other things, "proposals and bids to enter into any contract or agreement until the time for the opening of bids to be opened publicly, and until the time for the receipt of bids or proposals has expired in all other cases," as well as intra- or inter- agency communications made with respect to reviewing bids and proposals, prior to a decision to enter into negotiations or award contracts. M.G.L. c. 4, §7(26)(g) exempts "trade secrets or commercial or financial information voluntarily provided to an agency for use in developing governmental policy and upon a promise of confidentiality," though this exemption does not apply to information "submitted […] as a condition of receiving a governmental contract."

4. System and Document Security Requirements. All documents including both paper copy and electronic files provided to the Responders for printing, copying or digital imaging and any copies or duplicates of electronic files made from those provided by the CRA are the property of the CRA and shall not be provided to any third party without the prior written consent of the CRA.

5. Reasonable Accommodation. Responders with disabilities or hardships that seek reasonable accommodation, which may include the receipt of RFP information in an alternate format, must communicate such requests in writing to the CRA. Requests for accommodation will be addressed on a case-by-case basis. A Responder requesting accommodation must submit a written statement, which describes the disability and the requested accommodation. The CRA reserves the right to reject unreasonable requests.

6. Acceptance/Rejection/Withdrawals of Proposals. The CRA reserves the right to amend or modify the RFP at any time during the procurement process, prior to the date and time which responses are due. All amendments and modifications will be posted on the CRA's website in the form of an Addendum. It is the responsibility of the Responder to check the website (www.cambridgeredevelopment.org) for Addenda. The CRA reserves the right, at its sole discretion, to: reject any or all proposals or parts of any and all proposals; re-circulate this RFP; terminate or suspend the solicitation process, at any time; or waive any irregularities in this RFP or in the proposals received as a result of this RFP; or reject any and all submissions, or portions thereof, all as may be deemed to be in the best interest of the CRA, subject to applicable law. A late response shall not be considered for award.

7. The Operational Agreement for this project will be between the CRA and the Operator.

8. A proposal will remain in effect for a period of ninety (90) calendar days from the deadline for submission of proposals, until it is formally withdrawn according to the procedures set forth herein, an Operational Agreement is executed, or the RFP is canceled, whichever occurs first.

9. Any changes or additions to proposers or personnel named in the Response must be submitted in writing and approved by the CRA.

8.0 APPENDIX

8.1 Forms

Form A - Policy on Release of Documents

Form B - Anti-Collusion Agreement

Form C - Submission Checklist

8.2 Reference Documents

You can find the following documents online at www.cambridgeredevelopment.org/foundry

- Foundry Lease
- Demonstration Plan
- City Council Presentation

Form A: Policy on Release of Documents

All materials submitted to the CRA in response to the RFP will become the property of the CRA and the City and, unless specifically exempted, should be considered to be public records under Massachusetts law. The CRA reserves the right to post materials submitted by Responders on its website at the appropriate time. As part of the selection process, the CRA will invite some or all of the Responders to participate in interview(s) and a community presentation. The undersigned certifies under penalties of perjury that the Responder understands the policy on Release of Documents.

Responder Name: ______________________________________

Authorized Signature: ______________________________________

Name (Printed): ______________________________________

Title: ______________________________________

Date: ______________________________________

Form B: Anti-Collusion Agreement

The undersigned certifies under penalties of perjury that this proposal has been made and submitted in good faith and without collusion or fraud with any other person (defined to mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals), and that it includes all submission requirements listed above.

Responder Name: ____

Authorized Signature: ____

Name (Printed): ____

Title: ____

Date: ____

Form C: Submission Checklist

Check each element below to confirm that you understand and have completed each Submission Requirement.

___ Letter of Interest

___ Project Concept and Management Approach

___ Staffing and Organization Plan

___ Business Model

___ Experience and Qualifications

___ Letters of Support, Collaboration and/or Commitment

___ Forms

CAMBRIDGE REDEVELOPMENT AUTHORITY

Odyssey
ADVISORS

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

February 2, 2018

Personal and Confidential

Mr. Tom Evans
Executive Director
Cambridge Redevelopment Authority
255 Main Street, 4th Floor
Cambridge, MA 02142

Re: GASB 74 and 75 – Summary of Results

Dear Mr. Evans:

The purpose of this letter is to summarize our actuarial valuation of the Cambridge Redevelopment Authority Other Postemployment Benefits Plan (the "Plan") for the Reporting Date and fiscal year ending December 31, 2018 with a Valuation Date of December 31, 2017 and a Measurement Date of December 31, 2017 in accordance with Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75").

<u>What caused plan liabilities to change from FY 15 to FY 18?</u>

Plan experience was in line with expectation - for the year ending on the Measurement Date of December 31, 2017, the Plan saw an experience loss of $19,806 or 2.23%. The slight loss was due to the identification of an employee with several years of service not on the prior valuation. This was mostly offset by premiums for Medicare integrated plans increasing less than the expected 16%. The actuarial experience loss is amortized into the net OPEB expense over time until fully recognized.

Over the three year period, the Total OPEB Liability ("TOL") went from $934,045 as of December 31, 2014 to $900,917 as of December 31, 2017 for a decrease of $33,128. The Net OPEB Expense was $5,853 for the fiscal year December 31, 2018. As this is the first year using GASB 75 methodology, there is no baseline for comparison. For a 30-year projection of future costs and liabilities refer to Exhibit C of our GASB 75 report.

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

If you or your auditors have questions on this report, feel free to give us a call.

Sincerely,

Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

Odyssey ADVISORS

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Cambridge Redevelopment Authority Other Postemployment Benefits Plan

GASB 74 Required Supplementary Information

With a Valuation Date of December 31, 2017

For the Reporting Date of December 31, 2017

Delivered February 2018

Odyssey ADVISORS

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

February 2, 2018

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Cambridge Redevelopment Authority other postemployment benefit programs with a Valuation Date of December 31, 2017 for the Reporting Date & fiscal year ending December 31, 2018 in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statement Number 74 for the determination of the liability for postemployment benefits other than pensions.

The actuarial data is based on the plan of benefits verified by the Authority and on participant claims or premium data provided by the Authority and/or vendors employed by the Authority.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may yield results significantly different than those reported here. As such, additional determinations may be needed for other purposes including determining the benefit security at termination and/or adequacy of the funding of an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion represents the information necessary to comply with GASB Statement Number 74 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries and other professional actuarial organizations and meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the Authority are reasonably related to the experience and expectations of the postemployment benefits programs.

Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

GASB 74 & 75 Required Supplementary Information
(Liabilities As of December 31, 2017)

1. EFFECT OF 1% CHANGE IN HEALTHCARE TREND

For the Reporting Date December 31, 2018, in the event that healthcare trend rates were 1% higher than forecast and employee contributions were to increase at the forecast rates, the Net OPEB Liability would increase to $1,042,310 or by 17.7% and the corresponding Service Cost would increase to $29,792 or by 40.0%. If such healthcare trend rates were 1% less than forecast and employee contributions were to increase at the forecast rate, the Net OPEB Liability would decrease to $761,578 or by 14.0% and the corresponding Service Cost would decrease to $15,100 or by 29.0%.

Impact of a 1% Change in the Healthcare Trend Rate as of the December 31, 2017 Reporting Date

	1% Decrease (4.00%)	Current Trend Rate (5.00%)	1% Increase (6.00%)
Net OPEB Liability	761,578	885,407	1,042,310
Service Cost	15,100	21,279	29,792

2. EFFECT OF 1% CHANGE IN DISCOUNT RATES

For the Reporting Date December 31, 2018, if the discount rate were 1% higher than what was used in this valuation, the Net OPEB Liability would decrease to $ 786,639 or by 11.2% and the corresponding Normal Cost would decrease to $16,692 or by 21.6%. If the discount rate were 1% lower than was used in this valuation, the Net OPEB Liability would increase to $1,007,818 or by 13.8% and the corresponding Normal Cost would increase to $27,502 or by 29.2%.

Impact of a 1% Change in the Discount Rate as of the December 31, 2017 Reporting Date

	1% Decrease (3.50%)	Current Discount Rate (4.50%)	1% Increase (5.50%)
Net OPEB Liability	1,007,818	885,407	786,639
Service Cost	27,502	21,279	16,692

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

GASB 74 & 75 Required Supplementary Information
(Liabilities As of December 31, 2017)

3. INVESTMENT POLICY

The chart below shows how the long-term rate of return on assets is developed based on the Authority's Investment Policy Statement.

Investment Target Allocation & Expected Long-Term Real Rate of Return

Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return
Domestic Equity - Large Cap	62.00%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	0.00%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	0.00%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	0.00%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	0.00%	Domestic Fixed Income	2.00%
International Fixed Income	0.00%	International Fixed Income	3.00%
Alternatives	0.00%	Alternatives	6.50%
Real Estate	0.00%	Real Estate	6.25%
Cash	38.00%	Cash	0.00%
Total	100.00%		
		I. Real Rate of Return	2.48%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	5.23%
		IV. Investment Expense	0.25%
		V.Net Investment Return [III.-IV.]	4.98%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

GASB 74 & 75 Required Supplementary Information
(Liabilities As of December 31, 2017)

4. SCHEDULE OF NET OPEB LIABILTY CHANGE

Schedule of Changes in the Authority's Net OPEB Liability and Related Ratios

	December 31, 2017
Total OPEB Liability	900,917
I. Service Cost	19,251
II. Interest on Total OPEB Liability, Service Cost, and Benefit Payments	39,355
III. Changes in Benefit terms	0
IV. Difference between Expected & Actual Plan Experience	20,678
V. Changes of assumptions	0
VI. Benefit Payments Excluding Implicit Cost	N/A
VII. Implicit Cost Amount	N/A
VIII. Total Benefit payments including Implicit Cost [VI.+VII.]	(66,619)
IX. Net Change in OPEB liability [I.+II.+III.+IV.+V.+VIII.]	12,665
X. Total OPEB liability - beginning of period	888,252
XI. Total OPEB liability - end of period [IX.+X.]	900,917
Plan Fiduciary Net Position	15,510
XII. Interest on Fiduciary Net Position	0
XIII. Earning from Plan Investments	1,510
XIV. Net investment gain/(loss) [XII.+XIII.]	1,510
XV. Employer Contribution to trust	80,619
XVI. Benefit payments from trust, including refunds of member contributions	(66,619)
XVII. Administrative expense	0
XVIII. Other	0
XIX. Net change in plan fiduciary net position [XIV.+XV.+XVI.+XVII.+XVIII.]	15,510
XX. Plan fiduciary net position - beginning of period	0
XXI. Plan fiduciary net position - end of period [XIX.+XX.]	15,510
XXII. Net OPEB Liability [XI.-XXI.]	885,407
XXIII. Plan fiducary net position as % of total OPEB liability [XXI. / XI.]	1.72%
XXIV. Covered employee payroll	391,450
XXV. Plan NOL as % of covered employee payroll [XXI. / XI.]	226.19%
Single Discount Rate to calculate Plan Liabilities	4.50%

Odyssey ADVISORS

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

5. ACTUARIALLY DETERMINED CONRIBUTION (ADC)

Actuarially Determined Contribution - Deficiency / (Excess)

	For the Fiscal Year Ending December 31, 2017
I. Service Cost	19,251
II. 30 year amortization of NOL at 4.50%	52,183
III. Actuarial Determined Contribution [I. + II.]	71,434
IV. Contributions in relation to the actuarially determined contribution	(80,619)
V. Contribution deficiency / (excess) [III. + IV.]	(9,185)
Covered employee payroll	391,450
Contributions as a % of covered employee payroll	20.59%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

GASB 74 & 75 Required Supplementary Information
(Liabilities As of December 31, 2017)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of December 31, 2017.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Reporting Date, December 31, 2017.

Plan Membership

Plan Membership: At December 31, 2017, OPEB plan membership consisted of the following

Inactive employees or beneficiaries currently receiving benefits:	12
Active Employees:	5
Total:	17

Actuarial Assumptions:

Investment Rate of Return:	4.98%, net of OPEB plan investment expense, including inflation.
Municipal Bond Rate:	3.16% as of December 31, 2017 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)
Single Equivalent Discount Rate:	4.50%, net of OPEB plan investment expense, including inflation. Using a blend of the Municipal Bond Index Rate for unfunded periods and the Investment Rate of Return for funded periods, based on GASB No. 74 Implementation Guide Exposure Draft; IG ED 4.136.
Inflation:	2.75% as of December 31, 2017 and for future periods
Salary Increases:	3.00% annually as of December 31, 2017 and for future periods
Cost of Living Adjustment:	Not Applicable

GASB 74 & 75 Required Supplementary Information
(Liabilities As of December 31, 2017)

Actuarial Assumptions (Continued):

Pre-Retirement Mortality:	RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Post-Retirement Mortality:	RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Disabled Mortality:	RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females
Mortality Experience Study:	The mortality assumptions reflect PERAC's recent experience analysis published in 2014 (based on the years 2006-2011), updated to reflect data through January 1, 2015 for post-retirement mortality, and professional judgement. As such, mortality assumptions reflect observed current mortality as well as expected mortality improvements.

Changes in Assumptions: Effective for the Fiscal Year ending December 31, 2017

- Discount rate is 4.50% previously 4.00%
- The assumed pre-retirement mortality table is the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females-previously RP-2000 Mortality Table projected to 2017
- The assumed post-retirement mortality table is the RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females-previously RP-2000 Mortality Table projected to 2017
- The actuarial cost method is Individual Entry Age Normal

GASB 74 & 75 Required Supplementary Information
Projection Exhibits
(Liabilities As of December 31, 2017)

Projection of OPEB Plan's Fiduciary Net Position using a December 31, 2017 Valuation Date

Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members	III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings
2017	0	66,619	66,619	0	14,000	14,000	1,510
2018	15,510	53,183	53,183	0	7,000	6,438	945
2019	22,893	53,909	53,909	0	7,000	6,004	1,312
2020	30,209	53,631	53,631	0	7,000	5,623	1,677
2021	37,509	53,413	53,413	0	7,000	5,323	2,040
2022	44,872	53,230	53,230	0	7,000	5,079	2,407
2023	52,358	53,062	53,062	0	7,000	4,854	2,780
2024	59,992	47,920	47,920	0	7,000	4,706	3,160
2025	67,858	49,022	49,022	0	7,000	3,284	3,552
2026	74,694	52,622	52,622	0	7,000	3,161	3,892
2027	81,747	52,357	52,357	0	7,000	3,067	4,243
2028	89,057	51,987	51,987	0	7,000	2,976	4,607
2029	96,640	51,479	51,568	0	7,000	2,895	4,985
2030	104,431	52,015	52,234	0	7,000	2,733	5,373
2031	112,318	53,071	53,477	0	7,000	2,510	5,766
2032	120,188	54,609	55,255	0	7,000	2,258	6,158
2033	127,958	55,617	56,549	0	7,000	2,085	6,544
2034	135,655	55,664	56,870	0	7,000	1,955	6,928
2035	143,332	53,660	55,161	0	7,000	1,769	7,310
2036	150,910	53,359	55,252	0	7,000	1,639	7,688
2037	158,344	54,300	56,761	0	7,000	1,474	8,058
2038	165,415	52,530	55,509	0	7,000	1,263	8,410
2039	172,109	54,410	58,040	0	7,000	990	8,743
2040	178,212	56,548	60,965	0	7,000	858	9,047
2041	183,700	57,031	62,332	0	7,000	765	9,320
2042	188,484	51,868	58,116	0	7,000	644	9,559
2043	192,439	51,423	58,882	0	7,000	588	9,756
2044	195,324	50,981	59,600	0	7,000	543	9,899
2045	197,147	45,014	54,805	0	7,000	501	9,990
2046	197,847	46,524	57,749	0	7,000	352	10,025
2047	196,999	49,096	61,945	0	7,000	245	9,983
2048	194,378	50,789	65,454	0	7,000	182	9,852
2049	189,747	51,767	68,493	0	7,000	141	9,622
2050	182,784	49,208	68,218	0	7,000	84	9,275
2051	173,133	49,375	70,728	0	7,000	62	8,794
2052	160,636	49,479	73,166	0	7,000	46	8,172
2053	145,167	46,479	72,946	0	7,000	32	7,401
2054	126,133	46,316	75,567	0	7,000	0	6,454
2055	103,336	46,441	78,451	0	7,000	0	5,318
2056	76,644	46,170	81,347	0	7,000	0	3,989

GASB 74 & 75 Required Supplementary Information
Projection Exhibits
(Liabilities As of December 31, 2017)

Projection of OPEB Plan's Fiduciary Net Position using a December 31, 2017 Valuation Date (Continued)

Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members	III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings
2057	45,456	45,929	84,589	0	7,000	0	2,436
2058	9,232	45,719	88,038	0	7,000	0	632
2059	632	45,482	91,759	0	7,000	0	204
2060	204	45,229	95,804	0	7,000	0	182
2061	182	44,907	100,022	0	7,000	0	181
2062	181	44,523	104,365	0	7,000	0	181
2063	181	44,044	108,998	0	7,000	0	181
2064	181	43,468	113,707	0	7,000	0	181
2065	181	42,724	118,403	0	7,000	0	181
2066	181	41,819	123,231	0	7,000	0	181
2067	181	40,742	128,238	0	7,000	0	181
2068	181	39,487	133,358	0	7,000	0	181
2069	181	38,152	138,810	0	7,000	0	181
2070	181	36,898	144,787	0	7,000	0	181
2071	181	35,447	150,881	0	7,000	0	181
2072	181	33,828	157,103	0	7,000	0	181
2073	181	32,018	163,535	0	7,000	0	181
2074	181	30,062	170,203	0	7,000	0	181
2075	181	27,960	177,011	0	7,000	0	181
2076	181	25,845	184,192	0	7,000	0	181
2077	181	23,639	191,791	0	7,000	0	181
2078	181	21,472	199,891	0	7,000	0	181
2079	181	19,336	208,486	0	7,000	0	181
2080	181	17,238	217,668	0	7,000	0	181
2081	181	15,229	227,465	0	7,000	0	181
2082	181	13,275	237,873	0	7,000	0	181
2083	181	11,420	248,945	0	7,000	0	181
2084	181	9,702	260,758	0	7,000	0	181
2085	181	8,112	273,346	0	7,000	0	181
2086	181	6,668	286,726	0	7,000	0	181
2087	181	5,424	301,047	0	7,000	0	181
2088	181	4,360	316,318	0	7,000	0	181
2089	181	3,477	332,576	0	7,000	0	181
2090	181	2,734	349,849	0	7,000	0	181
2091	181	2,133	368,150	0	7,000	0	181
2092	181	1,624	387,488	0	7,000	0	181
2093	181	1,228	407,910	0	7,000	0	181
2094	181	890	429,441	0	7,000	0	181
2095	181	636	452,137	0	7,000	0	181
2096	181	447	476,030	0	7,000	0	181

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

GASB 74 & 75 Required Supplementary Information
Projection Exhibits
(Liabilities As of December 31, 2017)

Actuarial Present Values of Projected Benefit Payments using a December 31, 2017 Valuation Date

Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2017	0	66,619	0	66,619	0	66,619	66,619
2018	15,510	53,183	15,510	37,673	14,774	36,520	50,970
2019	22,893	53,909	22,893	31,016	20,773	29,147	49,515
2020	30,209	53,631	30,209	23,422	26,111	21,337	47,210
2021	37,509	53,413	37,509	15,904	30,882	14,045	45,061
2022	44,872	53,230	44,872	8,358	35,192	7,155	43,038
2023	52,358	53,062	52,358	704	39,115	584	41,117
2024	59,992	47,920	47,920	0	34,101	0	35,587
2025	67,858	49,022	49,022	0	33,231	0	34,890
2026	74,694	52,622	52,622	0	33,979	0	35,894
2027	81,747	52,357	52,357	0	32,204	0	34,227
2028	89,057	51,987	51,987	0	30,459	0	32,571
2029	96,640	51,479	51,479	0	28,731	0	30,910
2030	104,431	52,015	52,015	0	27,653	0	29,932
2031	112,318	53,071	53,071	0	26,876	0	29,269
2032	120,188	54,609	54,609	0	26,343	0	28,864
2033	127,958	55,617	55,617	0	25,557	0	28,173
2034	135,655	55,664	55,664	0	24,365	0	27,024
2035	143,332	53,660	53,660	0	22,373	0	24,966
2036	150,910	53,359	53,359	0	21,193	0	23,793
2037	158,344	54,300	54,300	0	20,543	0	23,205
2038	165,415	52,530	52,530	0	18,931	0	21,515
2039	172,109	54,410	54,410	0	18,678	0	21,357
2040	178,212	56,548	56,548	0	18,491	0	21,273
2041	183,700	57,031	57,031	0	17,765	0	20,561
2042	188,484	51,868	51,868	0	15,390	0	17,922
2043	192,439	51,423	51,423	0	14,534	0	17,029
2044	195,324	50,981	50,981	0	13,726	0	16,180
2045	197,147	45,014	45,014	0	11,544	0	13,691
2046	197,847	46,524	46,524	0	11,365	0	13,562
2047	196,999	49,096	49,096	0	11,425	0	13,716
2048	194,378	50,789	50,789	0	11,258	0	13,598
2049	189,747	51,767	51,767	0	10,931	0	13,283
2050	182,784	49,208	49,208	0	9,897	0	12,101
2051	173,133	49,375	49,375	0	9,460	0	11,637
2052	160,636	49,479	49,479	0	9,030	0	11,176
2053	145,167	46,479	46,479	0	8,080	0	10,062
2054	126,133	46,316	46,316	0	7,670	0	9,609
2055	103,336	46,441	46,441	0	7,326	0	9,234
2056	76,644	46,170	46,170	0	6,938	0	8,798

GASB 74 & 75 Required Supplementary Information
Projection Exhibits
(Liabilities As of December 31, 2017)

Actuarial Present Values of Projected Benefit Payments using a December 31, 2017 Valuation Date (Continued)

Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2057	45,456	45,929	45,456	473	6,506	136	8,388
2058	9,232	45,719	9,232	36,487	1,259	10,207	8,002
2059	632	45,482	632	44,850	82	12,163	7,629
2060	204	45,229	204	45,025	25	11,837	7,271
2061	182	44,907	182	44,725	21	11,398	6,919
2062	181	44,523	181	44,342	20	10,955	6,574
2063	181	44,044	181	43,863	19	10,505	6,233
2064	181	43,468	181	43,287	18	10,050	5,895
2065	181	42,724	181	42,543	18	9,575	5,553
2066	181	41,819	181	41,638	17	9,085	5,210
2067	181	40,742	181	40,561	16	8,579	4,864
2068	181	39,487	181	39,306	15	8,059	4,518
2069	181	38,152	181	37,971	14	7,547	4,184
2070	181	36,898	181	36,717	14	7,075	3,878
2071	181	35,447	181	35,266	13	6,587	3,570
2072	181	33,828	181	33,647	12	6,093	3,265
2073	181	32,018	181	31,837	12	5,588	2,962
2074	181	30,062	181	29,881	11	5,085	2,665
2075	181	27,960	181	27,779	11	4,582	2,376
2076	181	25,845	181	25,664	10	4,104	2,105
2077	181	23,639	181	23,458	10	3,636	1,845
2078	181	21,472	181	21,291	9	3,200	1,606
2079	181	19,336	181	19,155	9	2,790	1,386
2080	181	17,238	181	17,057	8	2,409	1,184
2081	181	15,229	181	15,048	8	2,060	1,003
2082	181	13,275	181	13,094	8	1,738	838
2083	181	11,420	181	11,239	7	1,446	691
2084	181	9,702	181	9,521	7	1,187	562
2085	181	8,112	181	7,931	7	959	451
2086	181	6,668	181	6,487	6	760	355
2087	181	5,424	181	5,243	6	596	277
2088	181	4,360	181	4,179	6	460	213
2089	181	3,477	181	3,296	5	352	163
2090	181	2,734	181	2,553	5	264	123
2091	181	2,133	181	1,952	5	196	92
2092	181	1,624	181	1,443	5	140	67
2093	181	1,228	181	1,047	5	99	49
2094	181	890	181	709	4	65	34
2095	181	636	181	455	4	40	23
2096	181	447	181	266	4	23	16

Odyssey ADVISORS

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Cambridge Redevelopment Authority Other Postemployment Benefits Plan

GASB 74/75 Actuarial Valuation

With a Valuation Date of December 31, 2017

& a Measurement Date of December 31, 2017

For the Reporting Dates of

December 31, 2018
December 31, 2019

Delivered February 2018

Odyssey ADVISORS
East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080
West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

TABLE OF CONTENTS

Odyssey ADVISORS

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

February 2, 2018

Personal and Confidential

Mr. Tom Evans
Executive Director
Cambridge Redevelopment Authority
255 Main Street, 4th Floor
Cambridge, MA 02142

Dear Mr. Evans:

We have performed an actuarial valuation of the Cambridge Redevelopment Authority Other Postemployment Benefits Plan for the Reporting Date & fiscal year ending December 31, 2018 with a Measurement Date of December 31, 2017 and a Valuation Date of December 31, 2017. The figures presented in this report reflect the adoption, by the Cambridge Redevelopment Authority, of Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75") effective for the fiscal year ending December 31, 2017 and December 31, 2018 respectively.

The financial results of the actuarial valuation are summarized in the report. The Executive Summaries highlight the results of the valuation. Additional information summarizing census data, actuarial assumptions, claim rates and the methodology for developing them, as well as a glossary of selected terms used in this study, is also included in the report.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions used are reasonable, reflecting the experience of the plan and reasonable expectations and, in combination, represent our best estimate of the anticipated experience under the plan.

We refer you to Section I of this report for a detailed summary and commentary on the results of the valuation and a comparison with the prior valuation. Section II is a summary of the plan provisions, and Section III describes the actuarial cost method and assumptions. Details for cost calculations, supporting data, and disclosures are provided in Exhibits A through C.

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

We will be pleased to answer any questions that you may have regarding this actuarial valuation report.

Very truly yours,

Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

Odyssey ADVISORS

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

February 2, 2018

ACTUARIAL CERTIFICATION

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Cambridge Redevelopment Authority other postemployment benefit programs with a Valuation Date of December 31, 2017 with a Measurement Date of December 31, 2017 for the Reporting Date & fiscal year ending December 31, 2018 in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Numbers 74 & 75 for the determination of the liability for postemployment benefits other than pensions.

The actuarial data is based on the plan of benefits verified by the Authority and on participant claims or premium data provided by the Authority and/or vendors employed by the Authority.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may yield results significantly different than those reported here. As such, additional determinations may be needed for other purposes including determining the benefit security at termination and/or adequacy of the funding of an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion represents the information necessary to comply with GASB Statements Number 74 and 75 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries and other professional actuarial organizations and meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the Authority are reasonably related to the experience and expectations of the postemployment benefits programs.

Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Executive Summary

GASB 74 and 75 Impact

The Authority adopted GASB 74 for the fiscal year ending December 31, 2017 and GASB 75 for the fiscal year ending December 31, 2018. The adoption of GASB 74/75 introduces a new actuarial cost method and discount rate as well as new disclosures and methodologies for reporting plan liabilities and OPEB expenses. Significant changes have been made to the recognition of OPEB expenses, which makes the comparison of Net OPEB Expense in the current valuation to the expenses reported under GASB 45 misleading. The liability reported on the Authority's balance sheet is likely to increase dramatically as GASB 74/75 require the recognition of liabilities immediately rather than over a 30 year period as GASB 45 allowed.

What caused plan liabilities to change from FY 15 to FY 18?

Plan experience was in line with expectation - for the year ending on the Measurement Date of December 31, 2017, the Plan saw an experience loss of $19,806 or 2.23%. The slight loss was due to the identification of an employee with several years of service not on the prior valuation. This was mostly offset by premiums for Medicare integrated plans increasing less than the expected 16%. The actuarial experience loss is amortized into the net OPEB expense over time until fully recognized. Changes in assumptions increased disclosed liabilities by $60 thousand.

Over the three year period, the Total OPEB Liability ("TOL") went from $934,045 as of December 31, 2014 to $900,917 as of December 31, 2017 for a decrease of $33,128. The Net OPEB Expense was $5,853 for the fiscal year December 31, 2018. As this is the first year using GASB 75 methodology, there is no baseline for comparison. For a projection of future costs and liabilities refer to Exhibit D.

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Executive Summary
(continued)

Assumption changes

Some key assumptions have changed since the prior valuation - their impact is detailed below.

- ✓ Based on recommendations by PERAC, the mortality table was updated from the RP-2000 Mortality Table projected to 2017 to RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females increasing the disclosed liability by $60 thousand.
- ✓ Due to the GASB 75 standards the discount rate was changed from 4.00% to 4.50% decreasing the disclosed liability by $50 thousand.
- ✓ GASB 75 requires a change in the actuarial cost method. As such, it has been updated to Entry Age Normal from Projected Unit Credit which increased the disclosed liability by $60 thousand.
- ✓ Assumption changes caused Normal Cost to increase by $1 thousand.

It is important to remember that actuarial assumptions or changes in such do not impact the actual cost of the Plan. Rather, they impact the timing of the recognition of such costs.

Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare Integrated) plans - represent 92% of the total plan liabilities
- ✓ Age at which plan participants retire
- ✓ Percentage of plan participants who elect coverage for themselves and/or a spouse
- ✓ Medical care cost inflation rate
- ✓ Discount Rate
- ✓ Cost Sharing - Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance.

Executive Summary
(continued)

What is Implicit Subsidy? How does it impact us?

The implicit subsidy arises because retirees who are not eligible for Medicare are charged the same premium as active employees, even though their actual medical costs are higher on average. Consequently, a portion of the premiums being paid for active employees are being used to "subsidize" the premiums of retirees. Actuarial Standards of Practice and GASB standards require the liability associated with this implicit subsidy to be valued. The chart below shows a breakdown of how implicit cost impacts reported liabilities.

Impact of Implicit Subsidy

	As Of The Measurement Date	
Impact on Liability	**December 31, 2017**	**December 31, 2014**
I. Actuarial Accrued Liability	900,917	934,045
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	898,520	N/A
III. Liability from Implicit Subsidy [I. - II.]	2,397	N/A

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Executive Summary
(continued)

What are some key plan metrics?

While an actuarial valuation under GASB 74/75 can be very complex with many variables, we find it helpful to look at several key metrics shown below to better allow you to manage your plan.

Representative Plan Statistics

	December 31, 2017	December 31, 2014
Total OPEB Liability	900,917	934,045
Per Eligible Active Plan Participant	30,518	1,808
Per Retiree/Spouse Plan Participant	62,361	54,625
Total Annual Service Cost (annual benefit accrual)	21,279	9,786
Per Eligible Active Plan Participant	4,256	3,262
Expected Employer Share of Retiree Costs	53,183	70,397
Per Retiree/Spouse Plan Participant	4,432	4,141
Net OPEB Liability as a % of Payroll	219.60%	333.60%
Average Annual Medical Plan Premium (Single Coverage)	5,243	4,793
Average Annual Medical Plan Premium (Family Coverage)	21,142	17,972
Projected 2020 Excise Tax Thresholds		
Annual Medical Plan Premium (Single Coverage)	11,850	
Annual Medical Plan Premium (Family Coverage)	30,950	

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Executive Summary
(continued)

Liabilities & Benefit Payments in today's dollars

With the growth of medical care costs over time, the nominal accrued liabilities ("TOL") and benefit payments can appear daunting. However, it is important to remember that a dollar paid in the future is worth less than a dollar paid today.

Measurement Date	Number of Retirees, Spouses & Surviving Spouses	Present Value at 3.00% of Total OPEB Liability	Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"
December 31, 2017	12	900,917	53,183
December 31, 2022	9	807,799	45,772
December 31, 2027	8	744,005	38,683
December 31, 2032	6	693,647	36,297
December 31, 2037	5	655,083	30,734
December 31, 2042	4	636,471	28,122
December 31, 2047	4	649,947	26,966

A full projection of plan costs and liabilities in today's dollars is shown in Exhibit E of this report.

We have an "unfunded liability". How do we fund it? Can we fund it?

If you're looking to fund your OPEB liability, there are a variety of manner to do so. The amount of funding in combination with your Investment Policy will impact the discount rate and disclosed liabilities. Below are a few sample funding options, but it's important to develop a funding policy that fits your organization as each situation is different.

	Partial Funding	**Full Funding Level Dollar**	**Full Funding increasing at 3.00% per year**
Net OPEB Liability	$885,407	$831,388	$831,388
Required Trust Contribution	$7,000	$20,600	$14,900
Discount Rate	4.50%	5.00%	5.00%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

Cambridge Redevelopment Authority
Assuming Partial Funding - 4.50% discount rate
Comparison of Plan Liabilities to Prior Valuation

			As of the Measurement Date	
			December 31, 2017	**December 31, 2014**
I.	Present Value of Future Benefits			
	A.	Actives	361,892	176,360
	B.	Retirees/Disabled	748,327	928,620
	C.	Total	1,110,219	1,104,980
II.	Present Value of Future Normal Cost		209,302	170,935
III.	Total OPEB Liability (Individual Entry Age Normal)			
	A.	Actives	152,590	5,425
	B.	Retirees/Disabled	748,327	928,620
	C.	Total	900,917	934,045
IV.	Fiduciary Net Position		15,510	0
V.	Net OPEB Liability (Asset) [III. - IV.]		885,407	934,045
VI.	Funded Ratio [IV. / III.]		1.72%	0.00%
VII.	Annual Covered Payroll		403,194	280,000
VIII.	Net OPEB Liability (Asset) as % of Covered Payroll		219.6%	333.6%
IX.	Number of Eligible Participants			
	A.	Actives	5	3
	B.	Retirees/Disabled	12	17
	C.	Total	17	20
	For the Reporting Date and Fiscal Year Ending December 31, 2018		**December 31, 2018**	**December 31, 2015**
X.	Service Cost		21,279	9,786
XI.	Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments		39,619	N/A
XII.	Deferred (Inflows)/Outflows from Plan Design Changes		0	N/A
XIII.	Deferred (Inflows)/Outflows from Expected & Actual Experience		5,559	N/A
XIV.	Deferred (Inflows)/Outflows from Changes in Assumptions		0	N/A
XV.	Projected Earning on OPEB plan investments		(247)	N/A
XVI.	Deferred (Inflows)/Outflows from Earnings on Investments		(174)	N/A
XVII.	Employer Share of Costs		(53,183)	(70,397)
XVIII.	Employer (Payments)/Withdrawals to/from OPEB Trust		(7,000)	0
XIX.	Total Employer Contribution [XVII. + XVIII.]		(60,183)	(70,397)
XX.	Other Changes		0	N/A
XXI.	Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XVI.+XIX.+XX.]		5,853	N/A
XXII.	Discount Rate		4.50%	4.00%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION
(continued)

Cambridge Redevelopment Authority
Comparison of Plan Funding vs. Partial Funding

As of the December 31, 2017 Measurement Date

		Partial Funding - 4.50% discount rate	Funding - 5.00% discount rate
I.	Present Value of Future Benefits		
	A. Actives	361,892	241,882
	B. Retirees/Disabled	748,327	736,161
	C. Total	1,110,219	978,043
II.	Present Value of Future Normal Cost	209,302	131,145
III.	Total OPEB LIability (Individual Entry Age Normal)		
	A. Actives	152,590	110,737
	B. Retirees/Disabled	748,327	736,161
	C. Total	900,917	846,898
IV.	Fiduciary Net Position	15,510	15,510
V.	Net OPEB Liability (Asset) [III. - IV.]	885,407	831,388
VI.	Funded Ratio [IV. / III.]	1.72%	1.83%
VII.	Annual Covered Payroll	403,194	403,194
VIII.	Net OPEB Liability (Asset) as % of Covered Payroll	219.6%	206.2%
IX.	Number of Eligible Participants		
	A. Actives	5	5
	B. Retirees/Disabled	12	12
	C. Total	17	17
	For the Reporting Date and Fiscal Year Ending December 31, 2018		
X.	Service Cost	21,279	18,632
XI.	Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	39,619	41,187
XII.	Deferred (Inflows)/Outflows from Plan Design Changes	0	0
XIII.	Deferred (Inflows)/Outflows from Expected & Actual Experience	5,559	5,559
XIV.	Deferred (Inflows)/Outflows from Changes in Assumptions	0	(14,521)
XV.	Projected Earning on OPEB plan investments	(247)	0
XVI.	Deferred (Inflows)/Outflows from Earnings on Investments	(174)	(174)
XVII.	Employer Share of Costs	(53,183)	(53,183)
XVIII.	Employer (Payments)/Withdrawals to/from OPEB Trust	(7,000)	(20,600)
XIX.	Total Employer Contribution [XVII. + XVIII.]	(60,183)	(73,783)
XX.	Other Changes	0	0
XXI.	Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.+XIX.+XX.]	5,853	(23,100)

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION I

PRINCIPAL RESULTS OF THE VALUATION
(continued)

Cambridge Redevelopment Authority
Assuming Partial Funding - 4.50% discount rate
Plan Liabilities as of the December 31, 2017 Measurement Date

		Medical	Dental	Life	Excise Tax	Total
I.	Present Value of Future Benefits					
	A. Actives	358,172	0	1,469	2,251	361,892
	B. Retirees/Disabled	732,054	0	16,272	1	748,327
	C. Total	1,090,226	0	17,741	2,252	1,110,219
II.	Present Value of Future Normal Cost	207,159	0	885	1,258	209,302
III.	Total OPEB Liability					
	A. Actives	151,013	0	584	993	152,590
	B. Retirees/Disabled	732,054	0	16,272	1	748,327
	C. Total	883,067	0	16,856	994	900,917
IV.	Fiduciary Net Position	15,203	0	290	17	15,510
V.	Net OPEB Liability (Asset) [III. - IV.]	867,864	0	16,566	977	885,407
VI.	Annual Covered Payroll	403,194	403,194	403,194	403,194	403,194
VII.	Net OPEB Liability (Asset) as % of Covered Payroll	215.2%	0.0%	4.1%	0.2%	219.6%
VIII.	Number of Eligible Participants					
IX.	A. Actives	5	5	5	5	
	B. Retirees/Disabled	12	0	6	12	
	C. Total	17	5	11	17	
	For the Reporting Date and Fiscal Year Ending December 31, 2018					
X.	Service Cost	21,051	0	120	108	21,279
XI.	Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	38,851	0	719	49	39,619
XII.	Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XIII.	Deferred (Inflows)/Outflows from Expected & Actual Experience	5,449	0	104	6	5,559
XIV.	Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0
XV.	Projected Earning on OPEB plan investments	(242)	0	(5)	0	(247)
XVI.	Deferred (Inflows)/Outflows from Earnings on Investments	(171)	0	(3)	0	(174)
XVII.	Employer Share of Costs	(51,772)	0	(1,411)	0	(53,183)
XVIII.	Employer (Payments)/Withdrawals to/from OPEB Trust	(6,861)	0	(131)	(8)	(7,000)
XIX.	Total Employer Contribution [XVII. + XVIII.]	(58,633)	0	(1,542)	(8)	(60,183)
XX.	Other Changes	0	0	0	0	0
XXI.	Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.+XIX.+XX.]	6,305	0	(607)	155	5,853

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION I

PRINCIPAL RESULTS OF THE VALUATION
(continued)

Cambridge Redevelopment Authority
Plan Liabilities as of the December 31, 2017 Measurement Date
Assuming Partial Funding

		Authority Employees and Retirees	Total
I.	Present Value of Future Benefits		
	A. Actives	361,892	361,892
	B. Retirees/Disabled	748,327	748,327
	C. Total	1,110,219	1,110,219
II.	Present Value of Future Normal Cost	209,302	209,302
III.	Total OPEB Liability		
	A. Actives	152,590	152,590
	B. Retirees/Disabled	748,327	748,327
	C. Total	900,917	900,917
IV.	Fiduciary Net Position	15,510	15,510
V.	Net OPEB Liability (Asset) [III. - IV.]	885,407	885,407
VI.	Annual Covered Payroll	403,194	403,194
VII.	Net OPEB Liability (Asset) as % of Covered Payroll	219.6%	219.6%
VIII.	Number of Eligible Participants		
	A. Actives	5	5
	B. Retirees/Disabled	12	12
	C. Total	17	17
	For the Reporting Date and Fiscal Year Ending December 31, 2018		
IX.	Service Cost	21,279	21,279
X.	Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	39,619	39,619
XI.	Deferred (Inflows)/Outflows from Plan Design Changes	0	0
XII.	Deferred (Inflows)/Outflows from Expected & Actual Experience	5,559	5,559
XIII.	Deferred (Inflows)/Outflows from Changes in Assumptions	0	0
XIV.	Projected Earning on OPEB plan investments	(247)	(247)
XV.	Deferred (Inflows)/Outflows from Earnings on Investments	(174)	(174)
XVI.	Employer Share of Costs	(53,183)	(53,183)
XVII.	Employer (Payments)/Withdrawals to/from OPEB Trust	(7,000)	(7,000)
XVIII.	Total Employer Contribution [XVI. + XVII.]	(60,183)	(60,183)
XIX.	Other Changes	0	0
XX.	Net OPEB Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.+XVIII.+XIX.]	5,853	5,853

SECTION I

PRINCIPAL RESULTS OF THE VALUATION
(continued)

Cambridge Redevelopment Authority
Detail of Plan Liabilities by Group and Dependency Status
Assuming Partial Funding - 4.50% discount rate
Plan Liabilities as of the December 31, 2017 Measurement Date

	Present Value of Future Benefits	Total OPEB Liability (Individual Entry Age Normal)	Service Cost
Actives			
Under Age 65			
A. Participants	29,138	15,809	1,444
B. Spouses	36,940	19,161	1,951
C. Total	66,078	34,970	3,395
Age 65 and Over			
A. Participants	185,230	65,330	10,373
B. Spouses	110,584	52,290	7,511
C. Total	295,814	117,620	17,884
Actives Total			
A. Participants	214,368	81,139	11,817
B. Spouses	147,524	71,451	9,462
C. Total	361,892	152,590	21,279
Retirees/Disabled			
Under Age 65			
A. Participants	39,996	39,996	0
B. Spouses	0	0	0
C. Total	39,996	39,996	0
Age 65 and Over			
A. Participants	448,840	448,840	0
B. Spouses	259,491	259,491	0
C. Total	708,331	708,331	0
Retirees/Disabled Total			
A. Participants	488,836	488,836	0
B. Spouses	259,491	259,491	0
C. Total	748,327	748,327	0
Total Population			
A. Participants	703,204	569,975	11,817
B. Spouses	407,015	330,942	9,462
C. Total	1,110,219	900,917	21,279

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION I

PRINCIPAL RESULTS OF THE VALUATION
(continued)

Cambridge Redevelopment Authority
Assuming Funding over 30 years at 5.00% discount rate
Plan Liabilities as of the December 31, 2017 Measurement Date

		Medical	Dental	Life	Excise Tax	Total
I.	Present Value of Future Benefits					
	A. Actives	239,457	0	1,047	1,378	241,882
	B. Retirees/Disabled	719,071	0	17,088	2	736,161
	C. Total	958,528	0	18,135	1,380	978,043
II.	Present Value of Future Normal Cost	128,860	0	1,597	688	131,145
III.	Total OPEB Liability (Individual Entry Age Normal)					
	A. Actives	110,597	0	(550)	690	110,737
	B. Retirees/Disabled	719,071	0	17,088	2	736,161
	C. Total	829,668	0	16,538	692	846,898
IV.	Fiduciary Net Position	15,194	0	303	13	15,510
V.	Net OPEB Liability (Asset) [III. - IV.]	814,474	0	16,235	679	831,388
VI.	Annual Covered Payroll	403,194	403,194	403,194	403,194	403,194
VII.	Net OPEB Liability (Asset) as % of Covered Payroll	202.0%	0.0%	4.0%	0.2%	206.2%
VIII.	Number of Eligible Participants					
	A. Actives	5	5	5	5	
	B. Retirees/Disabled	12	0	6	12	
	C. Total	17	5	11	17	
	For the Reporting Date and Fiscal Year Ending December 31, 2018					
IX.	Service Cost	18,449	0	106	77	18,632
X.	Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	40,367	0	782	38	41,187
XI.	Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XII.	Deferred (Inflows)/Outflows from Expected & Actual Experience	5,446	0	109	5	5,559
XIII.	Deferred (Inflows)/Outflows from Changes in Assumptions	(14,226)	0	(284)	(12)	(14,521)
XIV.	Projected Earning on OPEB plan investments	0	0	0	0	0
XV.	Deferred (Inflows)/Outflows from Earnings on Investments	(170)	0	(3)	(0)	(174)
XVI.	Employer Share of Costs	(51,772)	0	(1,411)	0	(53,183)
XVII.	Employer (Payments)/Withdrawals to/from OPEB Trust	(20,181)	0	(402)	(17)	(20,600)
XVIII.	Total Employer Contribution [XVI. + XVII.]	(71,953)	0	(1,813)	(17)	(73,783)
XIX.	Other Changes	0	0	0	0	0
XX.	Net OPEB Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.+XVIII.+XIX.]	(22,087)	0	(1,104)	91	(23,100)

SECTION I

PRINCIPAL RESULTS OF THE VALUATION
(continued)

Cambridge Redevelopment Authority
Plan Liabilities as of the December 31, 2017 Measurement Date
Assuming Funding over 30 years at 5.00% discount rate

		Authority Employees and Retirees	Total
I.	Present Value of Future Benefits		
	A. Actives	241,882	241,882
	B. Retirees/Disabled	736,161	736,161
	C. Total	978,043	978,043
II.	Present Value of Future Normal Cost	131,145	131,145
III.	Total OPEB Liability		
	A. Actives	110,737	110,737
	B. Retirees/Disabled	736,161	736,161
	C. Total	846,898	846,898
IV.	Fiduciary Net Position	15,510	15,510
V.	Net OPEB Liability (Asset) [III. - IV.]	831,388	831,388
VI.	Annual Covered Payroll	403,194	403,194
VII.	Net OPEB Liability (Asset) as % of Covered Payroll	206.2%	206.2%
VIII.	Number of Eligible Participants		
	A. Actives	5	5
	B. Retirees/Disabled	12	12
	C. Total	17	17
	For the Reporting Date and Fiscal Year Ending December 31, 2018		
IX.	Service Cost	18,632	18,632
X.	Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	41,187	41,187
XI.	Deferred (Inflows)/Outflows from Plan Design Changes	0	0
XII.	Deferred (Inflows)/Outflows from Expected & Actual Experience	5,559	5,559
XIII.	Deferred (Inflows)/Outflows from Changes in Assumptions	(14,521)	(14,521)
XIV.	Projected Earning on OPEB plan investments	0	0
XV.	Deferred (Inflows)/Outflows from Earnings on Investments	(174)	(174)
XVI.	Employer Share of Costs	(53,183)	(53,183)
XVII.	Employer (Payments)/Withdrawals to/from OPEB Trust	(20,600)	(20,600)
XVIII.	Total Employer Contribution [XVI. + XVII.]	(73,783)	(73,783)
XIX.	Other Changes	0	0
XX.	Net OPEB Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.+XVIII.+XIX.]	(23,100)	(23,100)

Overview of GASB 74 and 75

Before Statements 74 and 75, GASB statement 45 established the reporting standards for Other Postemployment Benefit ("OPEB") plans. It was designed to recognize the Other Postemployment Benefits earned by employees throughout their working career vs. when they are paid in retirement – accrual accounting vs. "pay-as-you-go" accounting. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a "Service Cost". These amounts are reflected in your financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment.

In 2012 GASB issued GASB Statements 67 and 68 to update and standardize the financial reporting of pension liabilities. This increased the transparency of pension liabilities by moving them to the balance sheet and made financial statement disclosures of pension liabilities more comparable between municipal entities. GASB Statements 74 and 75 are designed to have the same effect on OPEB plans.

GASB 74 and 75 require retiree medical plans to disclose information about asset and liability levels and show historical contribution information. GASB 74 only applies in situations where a separate trust is established to prefund these benefits. GASB 75 requires employers to perform periodic actuarial valuations to determine annual accounting costs and to keep a running tally of the extent to which these amounts are over or under funded.

GASB 74 and 75 apply to those benefits provided after retirement, except for pension benefits, such as medical, dental and life insurance. The philosophy behind the accounting standard is that these post-employment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 74 and 75 extend this practice to all other post-employment benefits.

Odyssey ADVISORS
East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080
West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Overview of GASB 74 and 75
(continued)

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

Turnover and retirement rates: How likely is it that an employee will qualify for post-employment benefits and when will they start?

Medical inflation and claims cost assumptions: When an employee starts receiving post-employment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption: How long is a retiree likely to receive benefits?

Discount rate assumption: What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the Authority, the present value is divided into three pieces: the part that is attributed to past years (the "Total OPEB Liability" or "Past Service Liability"), the part that is being earned this year (the "Service Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Service Cost have been calculated, the next step is to determine an actuarially determined contribution. This is an amount that if paid annually would fully prefund the benefits for current active and retired employees. This consists of two pieces:

- ✓ Service Cost – because the benefits earned by active employees each year should be paid for each year
- ✓ Past Service Cost – a catch-up payment to fund the Accrued Liability over a period of time determined by an actuary

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the Authority's financial statements as the Net OPEB Liability (NOL). If you decide to fully fund the NOL this will appear in the financial statement as a Net OPEB Asset. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.

Commentary on Plan Experience and Contribution Amounts

1. **GASB 74/75 – How we got here:**

GASB 74 and 75 were designed to recognize the Other Postemployment Benefits ("OPEB") earned by employees throughout their working career vs. when they are paid in retirement – accrual accounting vs. "pay-as-you-go" accounting while increasing disclosures to better reflect the plan's liabilities and future funding requirements. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a "Service Cost". These amounts are reflected in your financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment. Additionally, GASB 74 and 75 require increased disclosures comparable to those required under GASB 67 and 68 and interest rates used in the valuation are more closely tied to the plan's underlying investment and funding policy.

2. **GASB 74 and 75 Impact**

The Authority has adopted GASB 74 for the fiscal year ending December 31, 2017 and GASB 75 for the fiscal year ending December 31, 2018. The adoption of GASB 74/75 introduces a new actuarial cost method and discount rate as well as new disclosures and methodologies for reporting plan liabilities and OPEB expenses. Significant changes have been made to the recognition of OPEB expenses, making the comparison of Net OPEB Expense in the current valuation to the expenses reported under GASB 45 misleading. The liability reported on the Authority's balance sheet will increase dramatically as GASB 74/75 require the recognition of liabilities immediately rather than recognizing liabilities (Net OPEB Obligation) over a 30 year period as GASB 45 allowed. Please keep these changes in mind when considering any comparison to previously reported liabilities and expenses.

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

Commentary on Plan Experience and Contribution Amounts
(continued)

3. **Balance Sheet Items as of the Measurement Date**

	December 31, 2017	December 31, 2014
Total OPEB Liability	$900,917	$934,045
Fiduciary Net Position	$15,510	$0
Net OPEB Liability	$885,407	$934,045
Funded Ratio	1.72%	0.00%

5. **Income Statement Items as of the Fiscal Year Ending**

	December 31, 2018	December 31, 2015
Service Cost	$21,279	$9,786
Interest Expense	$39,619	N/A
(Inflow)/Outflow from Plan Design Changes	$0	N/A
(Inflow)/Outflow from Plan Experience	$5,559	N/A
(Inflow)/Outflow from Changes in Assumptions	$0	N/A
Projected Investment Earnings	$(247)	N/A
(Inflow)/Outflow from Earnings on Investments	$(174)	N/A
Employer Share of Costs	$(53,183)	$(70,397)
Employer Payments (Withdrawals) to/from Trust	$(7,000)	$0
Total Employer Payments	$(60,183)	$(70,397)
Other Changes	$0	N/A
Net OPEB Expense	$5,853	N/A
Interest Rate	4.50%	4.00%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION II

SUMMARY OF PLAN PROVISIONS

Effective Date	GASB 45 is adopted January 1, 2009 GASB 74 is adopted for the fiscal year ending December 31, 2017 GASB 75 is adopted for the fiscal year ending December 31, 2018
Plan Year	January 1 through December 31.
Eligibility	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
Creditable Service	Elapsed time from date of hire to termination of service date.
Participant Contributions	20% of premiums for Medical & Life Insurance for participants who retire on or after October 1, 2009, 15% of premiums for Medical & Life Insurance for those who retire between July 1, 1994 and October 1, 2009 and 10% for all others.
Benefits Offered	Comprehensive Medical, Dental & Life Insurance offered through the Group Insurance Commission.
Normal Retirement Date	The normal retirement date is the first day of the month following a participant's 65th birthday.
Early Retirement	Early retirement is available for any participant who has attained benefit eligibility.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

A. ACTUARIAL COST METHOD

The actuarial cost method used to calculate the costs and liabilities of the plan is the Individual Entry Age Normal Actuarial Cost Method. Under this method, the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement. The annual normal cost for each active member is a level percent of payroll. The actuarial accrued liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

Actuarial gains and losses are calculated each year and amortized into the OPEB expense. Gains and losses arising from plan design changes are recognized immediately. Gains and losses arising from differences between expected and actual investment returns are amortized over a five (5) year period. Gain and losses arising from differences between expected and actual plan experience and changes in actuarial assumptions are amortized over the remaining lifetime of all active and retired plan participants (3.72 years for the Authority for the 2018 fiscal year).

All employees who are plan participants on the valuation date are included in the actuarial valuation.

B. ASSET VALUATION METHOD

The actuarial value of assets is equal to the Market Value of the Plan's assets as of the measurement date.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

C. ACTUARIAL ASSUMPTIONS

We used the following assumptions in this year's actuarial valuation:

Pre-Retirement Mortality	It is assumed that pre-retirement mortality is represented by the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Post-Retirement Mortality	It is assumed that post-retirement mortality is represented by the RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Disabled Mortality	It is assumed that disabled mortality is represented by the RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females
Mortality Experience Study	The mortality assumptions reflect PERAC's recent experience analysis published in 2014 (based on the years 2006-2011), updated to reflect data through January 1, 2015 for post-retirement mortality, and professional judgement. As such, mortality assumptions reflect observed current mortality as well as expected mortality improvements.
Discount Rate	4.50% per annum (previously 4.00%)
Long Term Rate of Return	4.98% (based on investment policy)

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Municipal Bond Rate

3.16% as of December 31, 2017 (source: S&P Municipal Bond 20-Year High Grade Index – SAPIHG)

Employee Termination

It was assumed that employees would terminate employment in accordance with the sample rates shown in the following table:

Non-Public Safety Employees

Age	0-4 Years of Service (Males)	0-4 Years of Service (Females)	5-9 Years of Service (Males)	5-9 Years of Service (Females)	10+ Years of Service (Males)	10+ Years of Service (Females)
20	27.00%	27.00%	12.00%	12.00%	6.00%	6.00%
30	23.00%	23.00%	10.00%	10.00%	5.50%	5.50%
40	16.00%	16.00%	8.00%	8.00%	3.50%	3.50%
50	18.00%	18.00%	6.00%	6.00%	3.00%	3.00%
60	18.00%	18.00%	5.00%	5.00%	3.50%	3.50%

Public Safety Employees

Service	Public Safety Male	Public Safety Female
0	9.00%	9.00%
5	6.00%	6.00%
10	3.50%	3.50%
15	2.00%	2.00%
20	1.50%	1.50%
25	1.50%	1.50%
30	1.50%	1.50%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Retirement Rates

It was assumed that the following percentage of eligible employees would retire each year:

Age	Non Public Safety Male	Non Public Safety Female	Public Safety
45	0.00%	0.00%	1.00%
46	0.00%	0.00%	1.00%
47	0.00%	0.00%	1.00%
48	0.00%	0.00%	1.00%
49	0.00%	0.00%	1.00%
50	1.00%	1.50%	2.00%
51	1.00%	1.50%	2.00%
52	1.00%	2.50%	2.00%
53	1.00%	2.50%	5.00%
54	2.00%	2.50%	7.50%
55	2.00%	5.50%	15.00%
56	2.50%	6.50%	10.00%
57	2.50%	6.50%	10.00%
58	5.00%	6.50%	10.00%
59	6.50%	6.50%	15.00%
60	12.00%	5.00%	20.00%
61	20.00%	13.00%	20.00%
62	30.00%	15.00%	25.00%
63	25.00%	12.50%	25.00%
64	22.00%	18.00%	30.00%
65	40.00%	15.00%	100.00%
66	25.00%	20.00%	100.00%
67	25.00%	20.00%	100.00%
68	30.00%	25.00%	100.00%
69	30.00%	20.00%	100.00%
70	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

Disability rates

It was assumed that the following percentage of eligible employees would become permanently disabled each year:

Age	Standard	Teachers	Public Safety
20	0.01%	0.05%	0.20%
25	0.01%	0.06%	0.20%
30	0.01%	0.07%	0.21%
35	0.03%	0.10%	0.40%
40	0.07%	0.21%	0.71%
45	0.10%	0.30%	1.00%
50	0.13%	0.42%	1.10%
55	0.14%	0.50%	0.80%
60	0.12%	0.50%	0.80%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Healthcare Trend

It was assumed that healthcare costs would increase in accordance with the trend rates in the following table:

Year	Medical	Dental
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

Participation Rate

It was assumed that 80% of employees eligible to receive retirement benefits would enroll in the retiree medical and dental plans upon retirement. For life insurance plans, it was assumed that 80% of eligible employees would elect coverage upon retirement.

Percent Married

It was assumed that 80% of male participants and 70% of female participants who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement. It was further assumed that a male spouse is three years older than a female spouse and same sex spouses are assumed to be the same age. For current retirees, the actual census information was used.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Compensation Increases — 3.00% per year.

Open Group Forecast — It was assumed for projecting plan liabilities in future years that the active population would remain unchanged and that those who terminate employment or retire will be replace with new employees with the demographics below:

Open Group Forecast Population Demographics

Age	Male	Female
20	8.0%	5.0%
30	7.0%	14.0%
40	20.0%	19.0%
50	10.0%	10.0%
60	3.0%	4.0%
Total	48.0%	52.0%

Additional Comments — The values in this report reflect a closed group and do not reflect any new entrants after the valuation date.

For purposes of this valuation, retiree contributions were assumed to increase with the same trend rate as health care claims.

Medicare Part B Penalties are not reflected

Medicare Part B Reimbursement is not reflected

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely on the retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

- ✓ The cost sharing program is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:

- ✓ The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an "implicit subsidy". GASB 74 and 75 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. Actuarial Standard of Practice No. 6 ("ASOP 6") requires us to recognize this implicit subsidy while the plan sponsor may only pay the premiums billed by an insurance provider. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based on factors developed by actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page.

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents' coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program – different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors.

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - Based on Active & Retiree Incurred Claims & Premiums

	Number of Participants			
	Single	Two-Person	Family	Total
Fallon Direct				0
Harvard Pilgrim			1	1
Harvard Primary Choice			1	1
NHP Care	1			1
Tufts Navigator			1	1
Unicare Basic w/ CIC				0
Unicare Basic w/o CIC				0
Unicare OME w/ CIC	2	3		5
Unicare OME w/o CIC				0
Harvard Senior		1		1
Fallon Senior				0
Total	3	4	3	10

	Per Contract Costs (monthly) - FY 2018		
	Single	Two-Person	Family
Fallon Direct	552.70	0.00	1,326.60
Harvard Pilgrim	821.40	0.00	2,004.10
Harvard Primary Choice	618.50	0.00	1,509.30
NHP Care	552.10	0.00	1,463.10
Tufts Navigator	726.30	0.00	1,772.20
Unicare Basic w/ CIC	1,035.14		2,422.04
Unicare Basic w/o CIC	988.30		2,313.40
Unicare OME w/ CIC	379.29	758.58	
Unicare OME w/o CIC	368.60	737.20	
Harvard Senior	421.60	843.20	
Fallon Senior	335.00	670.00	

Gross Expected FY 2018 Incurred Premiums	116,583
Adjustment to reflect children's claims	(11,438)
Total Expected FY 2018 Incurred Premiums (adults only)	105,144

II. PRE-65 AND POST-65 PER CAPITA RETIREE ANNUAL CLAIM COSTS

	Employer Primary	Medicare Primary
Age 65	#DIV/0!	#DIV/0!
Average Age	8,792	4,550

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

III. BREAKDOWN OF CLAIM COSTS

ALL ACTIVE EMPLOYEES AND SPOUSES

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
24 & Under	1.312	0.549	#DIV/0!	#DIV/0!	#DIV/0!
25 to 29	1.312	0.591	#DIV/0!	#DIV/0!	#DIV/0!
30 to 34	1.312	0.712	#DIV/0!	#DIV/0!	#DIV/0!
35 to 39	1.312	0.850	#DIV/0!	#DIV/0!	#DIV/0!
40 to 44	1.312	1.000	#DIV/0!	#DIV/0!	#DIV/0!
45 to 49	1.456	1.193	#DIV/0!	#DIV/0!	#DIV/0!
50 to 54	1.599	1.441	#DIV/0!	#DIV/0!	#DIV/0!
55 to 59	1.740	1.753	#DIV/0!	#DIV/0!	#DIV/0!
60 to 64	1.968	2.102	#DIV/0!	#DIV/0!	#DIV/0!
65 to 69	2.168	2.316	#DIV/0!	#DIV/0!	#DIV/0!
70 & Over	2.396	2.557	#DIV/0!	#DIV/0!	#DIV/0!
Total					#DIV/0!

ALL RETIREES AND SPOUSES - NOT MEDICARE ELIGIBLE

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
44 & Under	1.312	1.000	#DIV/0!	#DIV/0!	#DIV/0!
45 to 49	1.456	1.193	#DIV/0!	#DIV/0!	#DIV/0!
50 to 54	1.599	1.441	#DIV/0!	#DIV/0!	#DIV/0!
55 to 59	1.740	1.753	#DIV/0!	#DIV/0!	#DIV/0!
60 to 64	1.968	2.102	#DIV/0!	#DIV/0!	#DIV/0!
65 to 69	2.168	2.316	#DIV/0!	#DIV/0!	#DIV/0!
70 to 74	2.396	2.557	#DIV/0!	#DIV/0!	#DIV/0!
75 to 79	2.593	2.769	#DIV/0!	#DIV/0!	#DIV/0!
80 to 84	2.724	2.910	#DIV/0!	#DIV/0!	#DIV/0!
85 to 89	2.864	3.059	#DIV/0!	#DIV/0!	#DIV/0!
90 & Over	3.010	3.215	#DIV/0!	#DIV/0!	#DIV/0!
Total					#DIV/0!

ALL RETIREES AND SPOUSES - MEDICARE ELIGIBLE

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
65 to 69	2.168	2.316	#DIV/0!	#DIV/0!	0
70 to 74	2.396	2.557	#DIV/0!	#DIV/0!	0
75 to 79	2.593	2.769	#DIV/0!	#DIV/0!	0
80 to 84	2.724	2.910	#DIV/0!	#DIV/0!	0
85 to 89	2.864	3.059	#DIV/0!	#DIV/0!	0
90 & Over	3.010	3.215	#DIV/0!	#DIV/0!	0
Total					0

Grand Totals	#DIV/0!

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS
(continued)

E. DEVELOPMENT OF REPRESENTATIVE DENTAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - with Active & Retiree Incurred Premiums

	Per Contract Costs (monthly) - FY 2018		
	Single	Two-Person	Family
Dental Plan	29.37		70.75

FY 2018 Expected Per Person Rate 352

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require the following disclosures in the financial statements related to the retiree medical, dental and life insurance benefits;

1. A DESCRIPTION OF THE RETIREE MEDICAL INSURANCE PROGRAM:

a. Plan Type:	Various offerings via the Group Insurance Commission ("GIC")
b. Administrator:	Cambridge Redevelopment Authority
c. Eligibility:	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
d. Cost Sharing:	20% of premiums for participants who retire on or after October 1, 2009, 15% of premiums for Medical Insurance for those who retire between July 1, 1994 and October 1, 2009 and 10% for all others.

2. A DESCRIPTION OF THE RETIREE DENTAL INSURANCE PROGRAM:

a. Plan Type:	Comprehensive Dental Insurance
b. Administrator:	Cambridge Redevelopment Authority
c. Eligibility:	Same as above
d. Cost sharing:	Retirees shall pay 100% of premiums.

3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

a. Plan Type:	Group Term Life Insurance - $5,000 - offered through the Group Insurance Commission
b. Administrator:	Cambridge Redevelopment Authority
c. Eligibility:	Same as above
d. Cost sharing:	20% of premiums for participants who retire on or after October 1, 2009, 15% of premiums for Medical & Life Insurance for those who retire between July 1, 1994 and October 1, 2009 and 10% for all others.

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

4. RETIREE MEDICAL AND LIFE INSURANCE CONTRIBUTIONS:

Group	Individual	Family
Medical	20% of premiums for participants who retire on or after October 1, 2009, 15% of premiums for Medical & Life Insurance for those who retire between July 1, 1994 and October 1, 2009 and 10% for all others.	20% of premiums for participants who retire on or after October 1, 2009, 15% of premiums for Medical & Life Insurance for those who retire between July 1, 1994 and October 1, 2009 and 10% for all others.
Dental	100%	100%
Life	20% of premiums for participants who retire on or after October 1, 2009, 15% of premiums for Medical & Life Insurance for those who retire between July 1, 1994 and October 1, 2009 and 10% for all others.	N/A

5. FUNDING POLICY

The contribution requirements of plan members and the Authority are established and may be amended through Authority ordinances. For the 2018 fiscal year, total Authority premiums plus implicit costs for the retiree medical program are $53,183. The Authority is also projected to make a contribution to an OPEB Trust of $7,000 for the 2018 fiscal year for a total contribution of $60,183.

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

6. INVESTMENT POLICY

The chart below shows how the long-term rate of return on assets is developed based on the Authority's Investment Policy Statement.

Investment Target Allocation & Expected Long-Term Real Rate of Return

Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return
Domestic Equity - Large Cap	62.00%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	0.00%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	0.00%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	0.00%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	0.00%	Domestic Fixed Income	2.00%
International Fixed Income	0.00%	International Fixed Income	3.00%
Alternatives	0.00%	Alternatives	6.50%
Real Estate	0.00%	Real Estate	6.25%
Cash	38.00%	Cash	0.00%
Total	100.00%		
		I. Real Rate of Return	2.48%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	5.23%
		IV. Investment Expense	0.25%
		V.Net Investment Return [III.-IV.]	4.98%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

7. ACTUARIALLY DETERMINED CONTRIBUTION (ADC)

The Authority's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which represents a level of funding that, if paid on an ongoing basis, is projected to cover the service cost each year and amortize any unfunded actuarial liabilities (or funding excess). The following table shows the components of the Authority's annual ADC for the fiscal year and the amount actually contributed to the plan:

Actuarially Determined Contribution - Deficiency / (Excess)

	For the Fiscal Year Ending December 31, 2018
I. Service Cost	21,279
II. 30 year amortization of NOL at 4.50%	52,016
III. Actuarial Determined Contribution [I. + II.]	73,295
IV. Contributions in relation to the actuarially determined contribution	(60,183)
V. Contribution deficiency / (excess) [III. + IV.]	13,112
Covered employee payroll	403,194
Contributions as a % of covered employee payroll	14.93%

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

8. FUNDED STATUS AND FUNDING PROGRESS

As of the December 31, 2017 Measurement Date, the plan was 1.72% funded. The Total OPEB Liability (TOL) for benefits was $900,917, and the Fiduciary Net Position was $15,510, resulting in a Net OPEB Liability (NOL) of $885,407. The covered payroll (annual payroll of active employees covered by the plan) was $ 403,194 and the ratio of the NOL to the covered payroll was 219.6%.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the actuarially determined contribution of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented in the required supplementary information following the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the Total OPEB Liabilities for benefits.

Measurement Date	Fiduciary Net Position	Total OPEB Liability	Net OPEB Liability	Funded Ratio	Covered Payroll	NOL as a % of Covered Payroll
12/31/2019 (est.)	$31,795	$913,410	$881,615	3.5%	$427,749	206.1%
12/31/2018 (est.)	$23,455	$909,330	$885,875	2.6%	$415,290	213.3%
12/31/2017	$15,510	$900,917	$885,407	1.7%	$403,194	219.6%
12/31/2016	$0	$884,966	$884,966	0.0%	$391,450	226.1%
12/31/2015	$0	$908,371	$908,371	0.0%	$288,400	315.0%
12/31/2014	$0	$934,045	$934,045	0.0%	$280,000	333.6%

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

9. FIDUCIARY NET POSITION

Statement of Fiduciary Net Position
December 31, 2017 and December 31, 2018

	December 31, 2018 (Projected)	December 31, 2017
Assets		
I. Cash and cash equivalents	0	0
Receivables & Prepaid expenses:		
II. Contributions	0	0
III. Investment Income	0	0
IV. Receivables from brokers for unsettled trades	0	0
V. Prepaid expenses	0	0
VI. Total Receivables [II.+III.+IV.+V.]	0	0
OPEB Trust Investments:		
VII. Fixed Income	0	0
VIII. Stocks	14,542	9,616
IX. Cash and cash equivalents	8,913	5,894
X. Real estate	0	0
XI. Alternative investments	0	0
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	23,455	15,510
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
Total Assets	23,455	15,510
Liabilities		
XIII. Accrued expenses and benefits payable	0	0
XIV. Securities lending cash collateral	0	0
XV. Payable to brokers for unsettled trades	0	0
XVI. Total liabilities [XIII.+XIV.+XV.]	0	0
XVII. Net Position restricted for OPEB [XII.-XVI.]	23,455	15,510

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

9. FIDUCIARY NET POSITION (CONTINUED)

Statement of Changes in Fiduciary Net Position
for the Year ended December 31, 2018 (Projected)

	December 31, 2017
Additions	
Contributions	
Employer Contributions to OPEB Trust	7,000
Total Contributions	7,000
Investment Income / (loss)	
Interest	0
Dividends	192
Equity fund income, net	0
Net increase in fair value of investments	753
Securities lending income	0
Less investment expenses:	
Direct investment expense	0
Securities lending management fees	0
Securities lending borrower rebates	0
Net investment income	945
Other income	0
Total Additions	7,945
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Total deductions	0
Net increase (decrease)	7,945
Net Position restricted for OPEB	
Beginning of year	15,510
End of year	23,455

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

10. OPEB LIABILITY, OPEB EXPENSE AND ADC

	Fiscal Year Ending December 31, 2018	
	Authority Employees and Retirees	Total
I. Total OPEB Liability	900,917	900,917
II. Fiduciary Net Position as of December 31, 2017	15,510	15,510
III. Net OPEB Liability (Asset) [I.-II.]	885,407	885,407
IV. Service Cost	19,251	19,251
V. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	39,355	39,355
VI. Change in Deferred (Inflows)/Outflows from Plan Design Changes	-	-
VII. Change in Deferred (Inflows)/Outflows from Plan Experience	20,678	20,678
VIII. Change in Deferred (Inflows)/Outflows from Changes in Assumptions	-	-
IX. Projected Earnings on OPEB plan investments	(638.00)	(638)
X. Change in Deferred (Inflows)/Outflows from Earnings on Investments	(872)	(872)
XI. Employer Share of Costs	(66,619)	(66,619)
XII. Employer Payments (Withdrawals) to/from OPEB Trust	(14,000)	(14,000)
XIII. Total Employer Contribution [X.+XI.]	(80,619)	(80,619)
XIV. Net OPEB Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.+XIII.]	(2,845)	(2,845)
XV. Actuarial Determined Contribution (ADC)	73,295	73,295
XVI. Total Expected Contribution	80,619	80,619
XVII. Percentage of ADC Contributed [XVI./XV.]	110%	110%

	Fiscal Year Ending December 31, 2019	
	Authority Employees and Retirees	Total
I. Total OPEB Liability	909,330	909,330
II. Fiduciary Net Position as of December 31, 2018	23,455	23,455
III. Net OPEB Liability (Asset) [I.-II.]	885,875	885,875
IV. Service Cost	21,279	21,279
V. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	39,619	39,619
VI. Change in Deferred (Inflows)/Outflows from Plan Design Changes	-	-
VII. Change in Deferred (Inflows)/Outflows from Plan Experience	5,559	5,559
VIII. Change in Deferred (Inflows)/Outflows from Changes in Assumptions	-	-
IX. Projected Earnings on OPEB plan investments	(247)	(247)
X. Change in Deferred (Inflows)/Outflows from Earnings on Investments	(174)	(174)
XI. Employer Share of Costs	(53,183)	(53,183)
XII. Employer Payments (Withdrawals) to/from OPEB Trust	(7,000)	(7,000)
XIII. Total Employer Contribution [X.+XI.]	(60,183)	(60,183)
XIV. Net OPEB Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.+XIII.]	5,853	5,853
XV. Actuarial Determined Contribution (ADC)	73,322	73,322
XVI. Total Expected Contribution	60,183	60,183
XVII. Percentage of ADC Contributed [XVI./XV.]	82%	82%

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

11. OPEB LIABILITY, OPEB EXPENSE AND DEFERRED INFLOW/OUTFLOW

Net OPEB Liability

	For the Fiscal Year Ending	
	December 31, 2018	**December 31, 2019**
Net OPEB Liability at beginning of period	888,252	885,407
Net OPEB Expense - Excluding Payments	57,968	66,036
Total Contributions	(80,619)	(60,183)
Change in Deferred Outflow	20,678	(5,559)
Change in Deferred Inflow	(872)	174
Net OPEB Liability at end of period	885,407	885,875

Net OPEB Expense

	For the period ending on the Measurement Date	
	December 31, 2017	**December 31, 2018**
Service Cost	19,251	21,279
Interest on Net OPEB Liability, Service Cost, and Payments	39,355	39,619
Deferral Amount	59,395	5,385
Expected Investment Income	(638)	(247)
Contributions to Trust	(14,000)	(7,000)
Benefit Payments	(66,619)	(53,183)

Deferred Inflow/Outflow

	For the period ending on the Measurement Date	
	December 31, 2017	**December 31, 2018**
Deferred (Inflow)/Outflow from Actual vs. Expected Experience	20,678	15,119
Deferred (Inflow)/Outflow from Investment Experience	(872)	(698)
Deferred (Inflow)/Outflow from Changes in Benefit Terms	0	0
Deferred (Inflow)/Outflow from Changes in Assumptions	0	0

Measurement Date	**December 31, 2017**	**December 31, 2018**

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

12. EFFECT OF 1% CHANGE IN HEALTHCARE TREND

In the event that healthcare trend rates were 1% higher than forecast and employee contributions were to increase at the forecast rates, the Net OPEB Liability would increase to $1,042,310 or by 17.7% and the corresponding Service Cost would increase to $29,792 or by 40.0%. If such healthcare trend rates were 1% less than forecast and employee contributions were to increase at the forecast rate, the Net OPEB Liability would decrease to $761,578 or by 14.0% and the corresponding Service Cost would decrease to $15,100 or by 29.0%.

Impact of a 1% Change in the Healthcare Trend Rate as of the December 31, 2017 Measurement Date

	1% Decrease (4.00%)	Current Trend Rate (5.00%)	1% Increase (6.00%)
Net OPEB Liability	761,578	885,407	1,042,310
Service Cost	15,100	21,279	29,792

13. EFFECT OF 1% CHANGE IN DISCOUNT RATES

If the discount rate were 1% higher than what was used in this valuation, the Net OPEB Liability would decrease to $786,639 or by 11.2% and the corresponding Service Cost would decrease to $16,692 or by 21.6%. If the discount rate were 1% lower than was used in this valuation, the Net OPEB Liability would increase to $1,007,818 or by 13.8% and the corresponding Service Cost would increase to $27,502 or by 29.2%.

Impact of a 1% Change in the Discount Rate as of the December 31, 2017 Measurement Date

	1% Decrease (3.50%)	Current Discount Rate (4.50%)	1% Increase (5.50%)
Net OPEB Liability	1,007,818	885,407	786,639
Service Cost	27,502	21,279	16,692

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

14. ACTUARIAL METHODS AND ASSUMPTIONS

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Actuarial Cost Method: Individual Entry Age Normal
Discount Rate: 4.50% per annum (previously 4.00%)
Healthcare Trend Rates

Year	Medical	Dental
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

General Inflation Assumption: 2.75% per annum
Annual Compensation Increases: 3.00% per annum
Actuarial Value of Assets: Market Value

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

15. RECOGNITION OF OPEB TRUST ASSETS

The State of Massachusetts has passed legislation allowing municipal entities to establish a Trust for Other Postemployment Benefits ("OPEB") under M.G.L. Chapter 32B, Section 20 for purposes of accumulating assets to pre-fund the liabilities under GASB 75. This legislation was amended effective November 9, 2016 to clarify who may adopt such a Trust and provide guidance on the ongoing operation of such a Trust. To the best of our knowledge, the Cambridge Redevelopment Authority has established an irrevocable trust for the purposes of prefunding liabilities under GASB 74/75.

16. OPEB EXPENSE DEVELOPMENT

Components of the Authority's OPEB Expenses for the Fiscal Year Ending December 31, 2018

Description	Amount
I. Service Cost	21,279
II. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	39,619
III. Deferred (Inflows)/Outflows from Plan Design Changes*	0
IV. Deferred (Inflows)/Outflows from Plan Experience**	5,559
V. Deferred (Inflows)/Outflows from Changes of Assumptions**	0
VI. Projected earnings on OPEB plan investments	(247)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	(174)
VIII. Total Employer Contributions	(60,183)
IX. OPEB Plan administrative expense	0
X. Other changes in fiduciary net position	0
XI. Net OPEB expense [I.+II.+III.+IV.+V.+VI.+VII.+VIII.+IX.+ X.]	5,853

* Recognized Immediately

** Amortized over 3.72 years

*** Amortized over 5 years

Odyssey ADVISORS
East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080
West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

17. CHANGES IN NET OPEB LIABILITY

Changes in Net OPEB Liability

	Increase (Decrease)		
	Total OPEB Liability	**Plan Fiduciary Net Position**	**Net OPEB Liability**
I. Balances at December 31, 2016 GASB 45	884,966	0	884,966
II. Change in Assumptions for GASB 75	3,286	0	3,286
III. Balances at December 31, 2016 GASB 75 [I. + II.]	888,252	0	888,252
Changes for the year:			
IV. Service Cost	19,251	0	19,251
V. Interest on Net OPEB Liability, Service Cost, and Benefit Payments	39,355	0	39,355
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	20,678	872	19,806
IX. Net Investment Income	0	638	(638)
X. Employer Contributions to Trust	0	80,619	(80,619)
XI. Benefit Payments Withdrawn from Trust	0	(66,619)	66,619
XII. Benefit payments excluding Implicit Cost	N/A	0	N/A
XIII. Implicit Cost amount	N/A	0	N/A
XIV. Total Benefit payments including Implicit Cost [XII. + XIII.]	(66,619)	0	(66,619)
XV. Administrative expense	0	0	0
XVI. Other Charges	0	0	0
XVII. Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]	12,665	15,510	(2,845)
XVII. Balances at December 31, 2017 [III.+XVII.]	900,917	15,510	885,407

* Recognized Immediately

** Amortized over 3.72 years

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

18. MONEY WEIGHTED RATE OF RETURN

Determination of Beginning & Ending Balances of OPEB Plan Investments for Purposes of Calculating the Annual Money-Weighted Rate of Return

	Ending OPEB Plan Investments *	Beginning OPEB Plan Investments **
Assets		
Cash and cash equivalents	0	0
Receivables:		
Investment income	0	0
Receivables from brokers for unsettled trades	0	0
Investments		
Fixed income	0	0
Stocks	14,542	9,616
Cash and cash equivalents	8,913	5,894
Real estate	0	0
Alternative investments	0	0
Invested securities lending cash collateral	0	0
Liabilities		
Securities lending cash collateral	0	0
Payable to brokers for unsettled trades	0	0
Total OPEB plan investments	23,455	15,510

* From balances at December 31, 2018 (Projected)
** From balances at December 31, 2017

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

18. MONEY WEIGHTED RATE OF RETURN (CONTINUED)

	Plan Investments / Net External	Periods Invested	Period Weight
Beginning value - January 1, 2017	0	12	1.0000
Monthly net external cash flows:			
January	14,000	11	0.9167
February	0	10	0.8333
March	0	9	0.7500
April	0	8	0.6667
May	0	7	0.5833
June	0	6	0.5000
July	0	5	0.4167
August	0	4	0.3333
September	0	3	0.2500
October	0	2	0.1667
November	0	1	0.0833
December	0	0	0.0000
Ending value - December 31, 2017	15,510		
Money Weighted Rate of Return	11.82%		
Asset Value - December 31, 2017	15,510		

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

19. PLAN CASH FLOWS

Aggregate External (Noninvestment Cash Flows)

	December 31, 2018
Additions	
Contributions	
Member contributions	0
Employer contributions	7,000
Other income	0
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Beginning balances of noninvestment-related assets and liabilities *	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Ending balances of noninvestment-related assets and liabilities **	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Change in capital assets - depreciation	0
Aggregate external cash flows	7,000

* From balances at December 31, 2018 (Projected)
** From balances at December 31, 2017

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

19. PLAN CASH FLOWS (CONTINUED)

Reconciliation of Beginning & Ending Balances of OPEB Plan Investments, Aggregate External Cash Flows, and Net Investment Income

	December 31, 2018 (Projected)
I. Total OPEB plan investments, beginning of year	15,510
II. Aggregate external cash flows	7,000
III. Net investment income	945
IV. Total OPEB plan investments, end of year [I.+II.+III.]	23,455

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

20. PLAN PROJECTION DISCLOSURES

Projection of Contributions using a December 31, 2017 Valuation Date

Fiscal Year	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
2018	403,194	0	403,194	0	53,183	0	53,183
2019	381,946	33,344	415,290	0	53,909	0	53,909
2020	366,896	60,853	427,749	0	53,631	0	53,631
2021	353,924	86,657	440,581	0	53,413	0	53,413
2022	345,074	108,724	453,798	0	53,230	0	53,230
2023	339,126	128,286	467,412	0	53,062	0	53,062
2024	333,835	147,599	481,434	0	47,920	0	47,920
2025	333,401	162,476	495,877	0	49,022	0	49,022
2026	239,648	271,105	510,753	0	52,622	0	52,622
2027	237,592	288,484	526,076	0	52,357	0	52,357
2028	237,431	304,427	541,858	0	51,987	0	51,987
2029	237,270	320,844	558,114	0	51,479	89	51,568
2030	237,764	337,093	574,857	0	52,015	219	52,234
2031	231,161	360,942	592,103	0	53,071	406	53,477
2032	218,662	391,204	609,866	0	54,609	646	55,255
2033	202,595	425,567	628,162	0	55,617	932	56,549
2034	192,757	454,250	647,007	0	55,664	1,206	56,870
2035	186,094	480,323	666,417	0	53,660	1,501	55,161
2036	173,504	512,906	686,410	0	53,359	1,893	55,252
2037	165,582	541,420	707,002	0	54,300	2,461	56,761
2038	153,385	574,827	728,212	0	52,530	2,979	55,509
2039	135,372	614,686	750,058	0	54,410	3,630	58,040
2040	109,235	663,325	772,560	0	56,548	4,417	60,965
2041	97,502	698,235	795,737	0	57,031	5,301	62,332
2042	89,590	730,019	819,609	0	51,868	6,248	58,116
2043	77,675	766,522	844,197	0	51,423	7,459	58,882
2044	73,069	796,454	869,523	0	50,981	8,619	59,600
2045	69,450	826,159	895,609	0	45,014	9,791	54,805
2046	66,043	856,434	922,477	0	46,524	11,225	57,749
2047	47,809	902,342	950,151	0	49,096	12,849	61,945
2048	34,201	944,455	978,656	0	50,789	14,665	65,454
2049	26,228	981,788	1,008,016	0	51,767	16,726	68,493
2050	20,916	1,017,340	1,038,256	0	49,208	19,010	68,218
2051	12,801	1,056,603	1,069,404	0	49,375	21,353	70,728
2052	9,808	1,091,678	1,101,486	0	49,479	23,687	73,166
2053	7,520	1,127,011	1,134,531	0	46,479	26,467	72,946
2054	5,373	1,163,194	1,168,567	0	46,316	29,251	75,567
2055	0	1,203,624	1,203,624	0	46,441	32,010	78,451
2056	0	1,239,733	1,239,733	0	46,170	35,177	81,347
2057	0	1,276,925	1,276,925	0	45,929	38,660	84,589

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

Projection of Contributions using a December 31, 2017 Valuation Date (Continued)

Fiscal Year	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
2058	0	1,315,233	1,315,233	0	45,719	42,319	88,038
2059	0	1,354,690	1,354,690	0	45,482	46,277	91,759
2060	0	1,395,331	1,395,331	0	45,229	50,575	95,804
2061	0	1,437,191	1,437,191	0	44,907	55,115	100,022
2062	0	1,480,307	1,480,307	0	44,523	59,842	104,365
2063	0	1,524,716	1,524,716	0	44,044	64,954	108,998
2064	0	1,570,457	1,570,457	0	43,468	70,239	113,707
2065	0	1,617,571	1,617,571	0	42,724	75,679	118,403
2066	0	1,666,098	1,666,098	0	41,819	81,412	123,231
2067	0	1,716,081	1,716,081	0	40,742	87,496	128,238
2068	0	1,767,563	1,767,563	0	39,487	93,871	133,358
2069	0	1,820,590	1,820,590	0	38,152	100,658	138,810
2070	0	1,875,208	1,875,208	0	36,898	107,889	144,787
2071	0	1,931,464	1,931,464	0	35,447	115,434	150,881
2072	0	1,989,408	1,989,408	0	33,828	123,275	157,103
2073	0	2,049,090	2,049,090	0	32,018	131,517	163,535
2074	0	2,110,563	2,110,563	0	30,062	140,141	170,203
2075	0	2,173,880	2,173,880	0	27,960	149,051	177,011
2076	0	2,239,096	2,239,096	0	25,845	158,347	184,192
2077	0	2,306,269	2,306,269	0	23,639	168,152	191,791
2078	0	2,375,457	2,375,457	0	21,472	178,419	199,891
2079	0	2,446,721	2,446,721	0	19,336	189,150	208,486
2080	0	2,520,123	2,520,123	0	17,238	200,430	217,668
2081	0	2,595,727	2,595,727	0	15,229	212,236	227,465
2082	0	2,673,599	2,673,599	0	13,275	224,598	237,873
2083	0	2,753,807	2,753,807	0	11,420	237,525	248,945
2084	0	2,836,421	2,836,421	0	9,702	251,056	260,758
2085	0	2,921,514	2,921,514	0	8,112	265,234	273,346
2086	0	3,009,159	3,009,159	0	6,668	280,058	286,726
2087	0	3,099,434	3,099,434	0	5,424	295,623	301,047
2088	0	3,192,417	3,192,417	0	4,360	311,958	316,318
2089	0	3,288,190	3,288,190	0	3,477	329,099	332,576
2090	0	3,386,836	3,386,836	0	2,734	347,115	349,849
2091	0	3,488,441	3,488,441	0	2,133	366,017	368,150
2092	0	3,593,094	3,593,094	0	1,624	385,864	387,488
2093	0	3,700,887	3,700,887	0	1,228	406,682	407,910
2094	0	3,811,914	3,811,914	0	890	428,551	429,441
2095	0	3,926,271	3,926,271	0	636	451,501	452,137
2096	0	4,044,059	4,044,059	0	447	475,583	476,030

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Projection of OPEB Plan's Fiduciary Net Position using a December 31, 2017 Valuation Date

Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members	III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings	VIII. Projected Ending Fiduciary Net Position for Current Plan Members
2018	15,510	53,183	53,183	0	7,000	7,000	945	23,455
2019	23,455	53,909	53,909	0	7,000	6,438	1,340	31,233
2020	31,233	53,631	53,631	0	7,000	6,004	1,728	38,965
2021	38,965	53,413	53,413	0	7,000	5,623	2,113	46,701
2022	46,701	53,230	53,230	0	7,000	5,323	2,498	54,522
2023	54,522	53,062	53,062	0	7,000	5,079	2,887	62,488
2024	62,488	47,920	47,920	0	7,000	4,854	3,284	70,626
2025	70,626	49,022	49,022	0	7,000	4,706	3,689	79,021
2026	79,021	52,622	52,622	0	7,000	3,284	4,107	86,412
2027	86,412	52,357	52,357	0	7,000	3,161	4,475	94,048
2028	94,048	51,987	51,987	0	7,000	3,067	4,856	101,971
2029	101,971	51,479	51,568	0	7,000	2,976	5,250	110,108
2030	110,108	52,015	52,234	0	7,000	2,895	5,656	118,440
2031	118,440	53,071	53,477	0	7,000	2,733	6,070	126,837
2032	126,837	54,609	55,255	0	7,000	2,510	6,489	135,190
2033	135,190	55,617	56,549	0	7,000	2,258	6,905	143,421
2034	143,421	55,664	56,870	0	7,000	2,085	7,315	151,615
2035	151,615	53,660	55,161	0	7,000	1,955	7,723	159,792
2036	159,792	53,359	55,252	0	7,000	1,769	8,130	167,798
2037	167,798	54,300	56,761	0	7,000	1,639	8,529	175,505
2038	175,505	52,530	55,509	0	7,000	1,474	8,912	182,912
2039	182,912	54,410	58,040	0	7,000	1,263	9,281	189,826
2040	189,826	56,548	60,965	0	7,000	990	9,626	196,025
2041	196,025	57,031	62,332	0	7,000	858	9,934	201,516
2042	201,516	51,868	58,116	0	7,000	765	10,208	206,241
2043	206,241	51,423	58,882	0	7,000	644	10,443	209,869
2044	209,869	50,981	59,600	0	7,000	588	10,624	212,462
2045	212,462	45,014	54,805	0	7,000	543	10,753	213,967
2046	213,967	46,524	57,749	0	7,000	501	10,828	214,071
2047	214,071	49,096	61,945	0	7,000	352	10,833	212,407
2048	212,407	50,789	65,454	0	7,000	245	10,750	208,737
2049	208,737	51,767	68,493	0	7,000	182	10,567	202,760
2050	202,760	49,208	68,218	0	7,000	141	10,270	194,161
2051	194,161	49,375	70,728	0	7,000	84	9,841	182,733
2052	182,733	49,479	73,166	0	7,000	62	9,272	168,380
2053	168,380	46,479	72,946	0	7,000	46	8,558	150,517
2054	150,517	46,316	75,567	0	7,000	32	7,668	128,966
2055	128,966	46,441	78,451	0	7,000	0	6,595	103,551
2056	103,551	46,170	81,347	0	7,000	0	5,329	73,703
2057	73,703	45,929	84,589	0	7,000	0	3,843	38,886

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

Projection of OPEB Plan's Fiduciary Net Position using a December 31, 2017 Valuation Date (Continued)

Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members	III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings	VIII. Projected Ending Fiduciary Net Position for Current Plan Members
2058	38,886	45,719	88,038	0	7,000	0	2,109	2,109
2059	2,109	45,482	91,759	0	7,000	0	277	277
2060	277	45,229	95,804	0	7,000	0	186	186
2061	186	44,907	100,022	0	7,000	0	181	181
2062	181	44,523	104,365	0	7,000	0	181	181
2063	181	44,044	108,998	0	7,000	0	181	181
2064	181	43,468	113,707	0	7,000	0	181	181
2065	181	42,724	118,403	0	7,000	0	181	181
2066	181	41,819	123,231	0	7,000	0	181	181
2067	181	40,742	128,238	0	7,000	0	181	181
2068	181	39,487	133,358	0	7,000	0	181	181
2069	181	38,152	138,810	0	7,000	0	181	181
2070	181	36,898	144,787	0	7,000	0	181	181
2071	181	35,447	150,881	0	7,000	0	181	181
2072	181	33,828	157,103	0	7,000	0	181	181
2073	181	32,018	163,535	0	7,000	0	181	181
2074	181	30,062	170,203	0	7,000	0	181	181
2075	181	27,960	177,011	0	7,000	0	181	181
2076	181	25,845	184,192	0	7,000	0	181	181
2077	181	23,639	191,791	0	7,000	0	181	181
2078	181	21,472	199,891	0	7,000	0	181	181
2079	181	19,336	208,486	0	7,000	0	181	181
2080	181	17,238	217,668	0	7,000	0	181	181
2081	181	15,229	227,465	0	7,000	0	181	181
2082	181	13,275	237,873	0	7,000	0	181	181
2083	181	11,420	248,945	0	7,000	0	181	181
2084	181	9,702	260,758	0	7,000	0	181	181
2085	181	8,112	273,346	0	7,000	0	181	181
2086	181	6,668	286,726	0	7,000	0	181	181
2087	181	5,424	301,047	0	7,000	0	181	181
2088	181	4,360	316,318	0	7,000	0	181	181
2089	181	3,477	332,576	0	7,000	0	181	181
2090	181	2,734	349,849	0	7,000	0	181	181
2091	181	2,133	368,150	0	7,000	0	181	181
2092	181	1,624	387,488	0	7,000	0	181	181
2093	181	1,228	407,910	0	7,000	0	181	181
2094	181	890	429,441	0	7,000	0	181	181
2095	181	636	452,137	0	7,000	0	181	181
2096	181	447	476,030	0	7,000	0	181	181

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a December 31, 2017 Valuation Date

Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2018	15,510	53,183	15,510	37,673	15,510	37,673	53,183
2019	23,455	53,909	23,455	30,454	22,342	29,522	51,657
2020	31,233	53,631	31,233	22,398	28,340	21,049	49,244
2021	38,965	53,413	38,965	14,448	33,679	13,162	46,994
2022	46,701	53,230	46,701	6,529	38,450	5,766	44,877
2023	54,522	53,062	53,062	0	41,615	0	42,866
2024	62,488	47,920	47,920	0	35,800	0	37,095
2025	70,626	49,022	49,022	0	34,886	0	36,363
2026	79,021	52,622	52,622	0	35,671	0	37,403
2027	86,412	52,357	52,357	0	33,808	0	35,659
2028	94,048	51,987	51,987	0	31,976	0	33,928
2029	101,971	51,479	51,479	0	30,162	0	32,193
2030	110,108	52,015	52,015	0	29,030	0	31,169
2031	118,440	53,071	53,071	0	28,214	0	30,474
2032	126,837	54,609	54,609	0	27,655	0	30,047
2033	135,190	55,617	55,617	0	26,829	0	29,323
2034	143,421	55,664	55,664	0	25,578	0	28,122
2035	151,615	53,660	53,660	0	23,488	0	25,977
2036	159,792	53,359	53,359	0	22,248	0	24,752
2037	167,798	54,300	54,300	0	21,566	0	24,136
2038	175,505	52,530	52,530	0	19,874	0	22,374
2039	182,912	54,410	54,410	0	19,608	0	22,206
2040	189,826	56,548	56,548	0	19,412	0	22,115
2041	196,025	57,031	57,031	0	18,649	0	21,372
2042	201,516	51,868	51,868	0	16,156	0	18,625
2043	206,241	51,423	51,423	0	15,258	0	17,694
2044	209,869	50,981	50,981	0	14,409	0	16,809
2045	212,462	45,014	45,014	0	12,119	0	14,222
2046	213,967	46,524	46,524	0	11,931	0	14,085
2047	214,071	49,096	49,096	0	11,994	0	14,242
2048	212,407	50,789	50,789	0	11,819	0	14,118
2049	208,737	51,767	51,767	0	11,475	0	13,789
2050	202,760	49,208	49,208	0	10,390	0	12,559
2051	194,161	49,375	49,375	0	9,931	0	12,076
2052	182,733	49,479	49,479	0	9,480	0	11,595
2053	168,380	46,479	46,479	0	8,483	0	10,437
2054	150,517	46,316	46,316	0	8,052	0	9,966
2055	128,966	46,441	46,441	0	7,691	0	9,576
2056	103,551	46,170	46,170	0	7,283	0	9,122
2057	73,703	45,929	45,929	0	6,901	0	8,695

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a December 31, 2017 Valuation Date (Continued)

Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2058	38,886	45,719	38,886	6,833	5,566	1,972	8,294
2059	2,109	45,482	2,109	43,373	288	12,133	7,906
2060	277	45,229	277	44,952	36	12,190	7,534
2061	186	44,907	186	44,721	23	11,757	7,168
2062	181	44,523	181	44,342	21	11,301	6,810
2063	181	44,044	181	43,863	20	10,836	6,455
2064	181	43,468	181	43,287	19	10,367	6,104
2065	181	42,724	181	42,543	18	9,877	5,749
2066	181	41,819	181	41,638	18	9,371	5,392
2067	181	40,742	181	40,561	17	8,850	5,034
2068	181	39,487	181	39,306	16	8,313	4,675
2069	181	38,152	181	37,971	15	7,785	4,328
2070	181	36,898	181	36,717	14	7,298	4,011
2071	181	35,447	181	35,266	14	6,795	3,692
2072	181	33,828	181	33,647	13	6,285	3,377
2073	181	32,018	181	31,837	12	5,765	3,062
2074	181	30,062	181	29,881	12	5,245	2,755
2075	181	27,960	181	27,779	11	4,727	2,455
2076	181	25,845	181	25,664	11	4,233	2,175
2077	181	23,639	181	23,458	10	3,751	1,906
2078	181	21,472	181	21,291	10	3,301	1,659
2079	181	19,336	181	19,155	9	2,879	1,432
2080	181	17,238	181	17,057	9	2,485	1,223
2081	181	15,229	181	15,048	8	2,125	1,035
2082	181	13,275	181	13,094	8	1,793	865
2083	181	11,420	181	11,239	8	1,492	713
2084	181	9,702	181	9,521	7	1,225	580
2085	181	8,112	181	7,931	7	989	465
2086	181	6,668	181	6,487	7	784	366
2087	181	5,424	181	5,243	6	615	285
2088	181	4,360	181	4,179	6	475	220
2089	181	3,477	181	3,296	6	363	168
2090	181	2,734	181	2,553	5	273	127
2091	181	2,133	181	1,952	5	202	95
2092	181	1,624	181	1,443	5	145	69
2093	181	1,228	181	1,047	5	102	50
2094	181	890	181	709	5	67	35
2095	181	636	181	455	4	42	24
2096	181	447	181	266	4	24	16

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

21. CHANGES TO NET OPEB EXPENSE

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of differences between expected & actual experience

Fiscal Year	Differences between actual & expected experience	Recognition Period (years)	2018	2019	2020	2021	2022	2023
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	20,678	3.72	5,559	5,559	5,559	4,001	0	0
Net increase (decrease) in OPEB expense			5,559	5,559	5,559	4,001	0	0

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

21. CHANGES TO NET OPEB EXPENSE (CONTINUED)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of Changes in Assumptions								
Fiscal Year	Differences from changes in Actuarial Assumptions	Recognition Period (years)	2018	2019	2020	2021	2022	2023
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	0	3.72	0	0	0	0	0	0
Net increase (decrease) in OPEB expense			0	0	0	0	0	0

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

21. CHANGES TO NET OPEB EXPENSE (CONTINUED)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of differences between Projected & Actual Earnings on OPEB Plan Investments

Fiscal Year	Differences between actual & expected experience	Recognition Period (years)	2018	2019	2020	2021	2022	2023
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	(872)	5.00	(174)	(174)	(174)	(174)	(176)	0
Net increase (decrease) in OPEB expense			(174)	(174)	(174)	(174)	(176)	0

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT A

Financial Statement Disclosure
(As of the December 31, 2017 Measurement Date)
(continued)

22. Impact of Patient Protection and Affordable Care Act ("PPACA") Excise Tax

Under the Patient Protection and Affordable Care Act ("PPACA"), an excise tax will be imposed for tax years beginning after December 31, 2019 (formerly December 31, 2017, but amended by Consolidated Appropriations Act) for high cost employer sponsored health coverage. The law specifies a 40% excise tax, to be paid by the provider of such coverage, of the excess value beyond a basic dollar amount plus an additional "kicker" for qualified retirees or those engaged in a high risk profession. The projected 2020 threshold amounts are $11,850 for single coverage and $30,950 for family coverage and a "kicker" amount of $1,650 for single coverage and $3,450 for family coverage.

For the fiscal year ending December 31, 2018, the TOL for the excise tax is $994 and the increase in OPEB Expense is $155. Given your premiums through the 2018 fiscal year and the excise tax threshold, your average single premiums are $6,607 below the excise tax threshold and your average family premiums are $9,808 below the excise tax threshold. As more regulatory guidance becomes available, the calculation of the excise tax liability will evolve.

EXHIBIT B

Required Supplementary Information
(As of the December 31, 2017 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of December 31, 2017.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, December 31, 2017.

Actuarial Assumptions:

Investment Rate of Return:	4.98%, net of OPEB plan investment expense, including inflation.
Single Equivalent Discount Rate:	4.50%, net of OPEB plan investment expense, including inflation.
Inflation:	2.75% as of December 31, 2017 and for future periods
Salary Increases:	3.00% annually as of December 31, 2017 and for future periods
Cost of Living Adjustment:	Not Applicable
Pre-Retirement Mortality:	RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Post-Retirement Mortality:	RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Disabled Mortality:	RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females

EXHIBIT B

Required Supplementary Information
(As of the December 31, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Plan Membership

Plan Membership: At December 31, 2017, OPEB plan membership consisted of the following

Inactive employees or beneficiaries currently receiving benefits:	12
Active Employees:	5
Total:	17

Changes in Assumptions: Effective December 31, 2017

- Discount rate is 4.50% previously 4.00%
- The assumed pre-retirement mortality table is the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females-previously RP-2000 Mortality Table projected to 2017
- The assumed post-retirement mortality table is the RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females-previously RP-2000 Mortality Table projected to 2017
- The actuarial cost method is Individual Entry Age Normal

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT B

Required Supplementary Information
(As of the December 31, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources Arising between Expected & Actual Experience

				Balances at December 31, 2018	
Fiscal Year	**Experience Losses**	**Experience Gains**	**Amounts recognized in OPEB Expense through December 31, 2018**	**Deferred Outflows of Resources**	**Deferred Inflows of Resources**
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	20,678	0	5,559	15,119	0
Total				15,119	0

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT B

Required Supplementary Information
(As of the December 31, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Changes of Assumptions

				Balances at December 31, 2018	
Fiscal Year	Increase in the Total OPEB Liability	Decrease in the Total OPEB Liability	Amounts recognized in OPEB Expense through December 31, 2018	Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	0	0	0	0	0
Total				0	0

EXHIBIT B

Required Supplementary Information
(As of the December 31, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources between Projected & Actual Earnings on OPEB Plan Investments

				Balances at December 31, 2018	
Fiscal Year	Increase in the Total OPEB Liability	Decrease in the Total OPEB Liability	Amounts recognized in OPEB Expense through December 31, 2018	Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	0	(872)	(174)	0	(698)
Total				0	(698)

EXHIBIT B

Required Supplementary Information
(As of the December 31, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB as of December 31, 2018

	Deferred Outflows of Resources	Deferred Inflows of Resources
I. Differences between actual & expected experience	15,119	0
II. Changes of assumptions	0	0
III. Net difference between projected & actual earnings on OPEB plan investments	0	(698)
IV. Total [I.+II.+III.]	15,119	(698)

Year ended June 30:	
2019	5,385
2020	5,385
2021	3,827
2022	(176)
2023	0
Thereafter	0

EXHIBIT B

Required Supplementary Information
(As of the December 31, 2017 Measurement Date)
(continued)

Notes to Required Supplementary Information (Continued):

Contributions:

The contribution requirements of plan members and the Authority are established and may be amended through Authority ordinances. The Authority expects to contribute $7,000 beyond the pay-as-you-go cost for the 2018 fiscal year. Total Authority premiums plus implicit costs for the retiree medical program are $53,183 for the 2018 fiscal year.

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT C

Reconciliation of Plan Participation
(As of the December 31, 2017 Valuation Date)

ACTIVE EMPLOYEES

	December 31, 2017	December 31, 2014
A. Average Age at Hire	39.84	43.98
B. Average Service	6.11	0.50
C. Average Current Age	45.95	44.48

RETIRED EMPLOYEES & DEPENDENTS

	December 31, 2017	December 31, 2014
I. Retirees		
A. Under Age 65	1	1
B. Age 65 & Over	6	9
C. Total Retirees	7	10
II. Dependents of Retirees		
A. Under Age 65	0	0
B. Age 65 & Over	5	7
C. Total Retirees	5	7
III. Retirees & Dependents		
A. Under Age 65	1	1
B. Age 65 & Over	11	16
C. Total Retirees	12	17

EXHIBIT D

Projected Cash Flows (Open Group) – Partial Funding Approach

Total Medical, Dental & Life Insurance - Partial Funding - 4.50% discount rate

Measurement Date	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 4.98% return	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Annual Funding / (Payments)	VIII. Total Employer Payments [VI. + VII.]
December 31, 2017	900,917	15,510	885,407	1.72%	21,279	53,183	7,000	60,183
December 31, 2018	909,330	23,455	885,875	2.58%	21,301	53,909	7,000	60,909
December 31, 2019	913,410	31,795	881,615	3.48%	21,501	53,631	7,000	60,631
December 31, 2020	920,199	40,551	879,648	4.41%	21,777	53,413	7,000	60,413
December 31, 2021	927,844	49,743	878,101	5.36%	22,172	53,230	7,000	60,230
December 31, 2022	936,460	59,392	877,068	6.34%	22,639	53,062	7,000	60,062
December 31, 2023	946,152	69,522	876,630	7.35%	23,154	47,920	7,000	54,920
December 31, 2024	962,581	80,156	882,425	8.33%	23,838	49,022	7,000	56,022
December 31, 2025	979,279	91,320	887,959	9.33%	18,480	52,622	7,000	59,622
December 31, 2026	987,532	103,040	884,492	10.43%	21,937	52,357	7,000	59,357
December 31, 2027	999,880	115,344	884,536	11.54%	22,727	51,987	7,000	58,987
December 31, 2028	1,014,034	128,260	885,774	12.65%	23,502	51,568	7,000	58,568
December 31, 2029	1,030,120	141,820	888,300	13.77%	24,349	52,234	7,000	59,234
December 31, 2030	1,047,100	156,055	891,045	14.90%	25,000	53,477	7,000	60,477
December 31, 2031	1,064,174	170,999	893,175	16.07%	25,576	55,255	7,000	62,255
December 31, 2032	1,080,680	186,687	893,993	17.27%	26,122	56,549	7,000	63,549
December 31, 2033	1,097,099	203,156	893,943	18.52%	26,917	56,870	7,000	63,870
December 31, 2034	1,114,761	220,445	894,316	19.78%	27,870	55,161	7,000	62,161
December 31, 2035	1,136,148	238,595	897,553	21.00%	28,781	55,252	7,000	62,252
December 31, 2036	1,159,395	257,649	901,746	22.22%	29,835	56,761	7,000	63,761
December 31, 2037	1,183,153	277,652	905,501	23.47%	31,323	55,509	7,000	62,509
December 31, 2038	1,210,956	298,651	912,305	24.66%	32,854	58,040	7,000	65,040
December 31, 2039	1,238,882	320,696	918,186	25.89%	34,292	60,965	7,000	67,965
December 31, 2040	1,266,282	343,839	922,443	27.15%	36,294	62,332	7,000	69,332
December 31, 2041	1,295,487	368,134	927,353	28.42%	38,095	58,116	7,000	65,116
December 31, 2042	1,332,628	393,639	938,989	29.54%	40,099	58,882	7,000	65,882
December 31, 2043	1,372,732	420,414	952,318	30.63%	42,076	59,600	7,000	66,600
December 31, 2044	1,415,973	448,523	967,450	31.68%	44,145	54,805	7,000	61,805
December 31, 2045	1,468,765	478,032	990,733	32.55%	46,270	57,749	7,000	64,749
December 31, 2046	1,523,053	509,010	1,014,043	33.42%	48,610	61,945	7,000	68,945
December 31, 2047	1,577,593	541,531	1,036,062	34.33%	51,763	65,454	7,000	72,454
December 31, 2048	1,634,029	575,671	1,058,358	35.23%	54,501	68,493	7,000	75,493

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - 5.00% discount rate increasing at 0.00% per year

Measurement Date	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 4.98% return	III. Net OPEB Liability (Asset) ("NOL") [I. - II.]	IV Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Annual Funding / (Payments)	VIII. Total Employer Payments [VI. + VII.]
December 31, 2017	846,898	15,510	831,388	1.83%	18,632	53,183	20,600	73,783
December 31, 2018	851,461	37,389	814,072	4.39%	18,641	53,909	20,600	74,509
December 31, 2019	855,392	60,358	795,034	7.06%	18,823	53,631	20,600	74,231
December 31, 2020	860,115	84,471	775,644	9.82%	19,073	53,413	20,600	74,013
December 31, 2021	865,664	109,784	755,880	12.68%	19,423	53,230	20,600	73,830
December 31, 2022	872,140	136,358	735,782	15.63%	19,830	53,062	20,600	73,662
December 31, 2023	879,632	164,255	715,377	18.67%	20,281	47,920	20,600	68,520
December 31, 2024	894,821	193,542	701,279	21.63%	20,908	49,022	20,600	69,622
December 31, 2025	910,150	224,287	685,863	24.64%	15,242	52,622	20,600	73,222
December 31, 2026	917,046	256,563	660,483	27.98%	18,220	52,357	20,600	72,957
December 31, 2027	927,265	290,447	636,818	31.32%	18,908	51,987	20,600	72,587
December 31, 2028	939,265	326,018	613,247	34.71%	19,579	51,568	20,600	72,168
December 31, 2029	953,219	363,360	589,859	38.12%	20,305	52,234	20,600	72,834
December 31, 2030	967,878	402,562	565,316	41.59%	20,834	53,477	20,600	74,077
December 31, 2031	982,362	443,716	538,646	45.17%	21,289	55,255	20,600	75,855
December 31, 2032	995,891	486,920	508,971	48.89%	21,705	56,549	20,600	77,149
December 31, 2033	1,009,003	532,275	476,728	52.75%	22,357	56,870	20,600	77,470
December 31, 2034	1,023,153	579,889	443,264	56.68%	23,148	55,161	20,600	75,761
December 31, 2035	1,041,215	629,874	411,341	60.49%	23,897	55,252	20,600	75,852
December 31, 2036	1,061,050	682,348	378,702	64.31%	24,768	56,761	20,600	77,361
December 31, 2037	1,081,006	737,436	343,570	68.22%	26,054	55,509	20,600	76,109
December 31, 2038	1,105,090	795,267	309,823	71.96%	27,402	58,040	20,600	78,640
December 31, 2039	1,128,692	855,978	272,714	75.84%	28,677	60,965	20,600	81,565
December 31, 2040	1,151,098	919,712	231,386	79.90%	30,413	62,332	20,600	82,932
December 31, 2041	1,174,718	986,620	188,098	83.99%	31,959	58,116	20,600	78,716
December 31, 2042	1,206,855	1,056,860	149,995	87.57%	33,689	58,882	20,600	79,482
December 31, 2043	1,241,677	1,130,598	111,079	91.05%	35,363	59,600	20,600	80,200
December 31, 2044	1,279,385	1,208,008	71,377	94.42%	37,107	54,805	20,600	75,405
December 31, 2045	1,327,530	1,289,274	38,256	97.12%	38,891	57,749	20,600	78,349
December 31, 2046	1,376,688	1,374,587	2,101	99.85%	40,920	61,945	20,600	82,545
December 31, 2047	1,425,400	1,464,148	(38,748)	102.72%	43,614	65,454	2,101	67,555
December 31, 2048	1,475,133	1,539,215	(64,082)	104.34%	45,931	68,493	0	68,493

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - 5.00% discount rate and increasing at 3.00% per year

Measurement Date	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 4.98% return	III. Net OPEB Liability (Asset) ("NOL") [I. - II.]	IV Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Annual Funding / (Payments)	VIII. Total Employer Payments [VI. + VII.]
December 31, 2017	846,898	15,510	831,388	1.83%	18,632	53,183	14,900	68,083
December 31, 2018	851,461	31,549	819,912	3.71%	18,641	53,909	15,347	69,256
December 31, 2019	855,392	48,845	806,547	5.71%	18,823	53,631	15,807	69,438
December 31, 2020	860,115	67,473	792,642	7.84%	19,073	53,413	16,281	69,694
December 31, 2021	865,664	87,515	778,149	10.11%	19,423	53,230	16,769	69,999
December 31, 2022	872,140	109,055	763,085	12.50%	19,830	53,062	17,272	70,334
December 31, 2023	879,632	132,183	747,449	15.03%	20,281	47,920	17,790	65,710
December 31, 2024	894,821	156,993	737,828	17.54%	20,908	49,022	18,324	67,346
December 31, 2025	910,150	183,586	726,564	20.17%	15,242	52,622	18,874	71,496
December 31, 2026	917,046	212,067	704,979	23.13%	18,220	52,357	19,440	71,797
December 31, 2027	927,265	242,546	684,719	26.16%	18,908	51,987	20,023	72,010
December 31, 2028	939,265	275,140	664,125	29.29%	19,579	51,568	20,624	72,192
December 31, 2029	953,219	309,973	643,246	32.52%	20,305	52,234	21,243	73,477
December 31, 2030	967,878	347,175	620,703	35.87%	20,834	53,477	21,880	75,357
December 31, 2031	982,362	386,883	595,479	39.38%	21,289	55,255	22,536	77,791
December 31, 2032	995,891	429,240	566,651	43.10%	21,705	56,549	23,212	79,761
December 31, 2033	1,009,003	474,399	534,604	47.02%	22,357	56,870	23,908	80,778
December 31, 2034	1,023,153	522,520	500,633	51.07%	23,148	55,161	24,625	79,786
December 31, 2035	1,041,215	573,772	467,443	55.11%	23,897	55,252	25,364	80,616
December 31, 2036	1,061,050	628,334	432,716	59.22%	24,768	56,761	26,125	82,886
December 31, 2037	1,081,006	686,393	394,613	63.50%	26,054	55,509	26,909	82,418
December 31, 2038	1,105,090	748,146	356,944	67.70%	27,402	58,040	27,716	85,756
December 31, 2039	1,128,692	813,801	314,891	72.10%	28,677	60,965	28,547	89,512
December 31, 2040	1,151,098	883,577	267,521	76.76%	30,413	62,332	29,403	91,735
December 31, 2041	1,174,718	957,705	217,013	81.53%	31,959	58,116	30,285	88,401
December 31, 2042	1,206,855	1,036,429	170,426	85.88%	33,689	58,882	31,194	90,076
December 31, 2043	1,241,677	1,120,004	121,673	90.20%	35,363	59,600	32,130	91,730
December 31, 2044	1,279,385	1,208,701	70,684	94.48%	37,107	54,805	33,094	87,899
December 31, 2045	1,327,530	1,302,802	24,728	98.14%	38,891	57,749	34,087	91,836
December 31, 2046	1,376,688	1,402,607	(25,919)	101.88%	40,920	61,945	24,728	86,673
December 31, 2047	1,425,400	1,497,793	(72,393)	105.08%	43,614	65,454	0	65,454
December 31, 2048	1,475,133	1,572,383	(97,250)	106.59%	45,931	68,493	0	68,493

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Cambridge Redevelopment Authority

GASB 45 Projection of Funding Annual Service Cost and Impact on Unfunded Obligation

Total Medical, Dental & Life Insurance - Funding Annual Service Cost - 4.50% discount rate

Measurement Date	I. Total OPEB Liability	II. Service Cost	III. Employer Share of Premiums / Claims including "implicit cost"	IV. Funding Service Cost beyond claims	V. Total Funding Costs [III. + IV.]	VI. Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"	VII. Present Value at 3.00% of Funding Service Cost beyond claims	VIII. Present Value at 3.00% of Total Funding Costs [VI. + VII.]	IX. Fiduciary Net Position at Beginning of year	X. Net OPEB Liability (Asset) [I. - IX.]	XI. Present Value at 3.00% of Net OPEB Liability (Asset)
##############	900,917	21,279	53,183	(31,904)	21,279	53,183	(31,904)	21,279	15,510	885,407	885,407
##############	909,330	21,301	53,909	(32,608)	21,301	52,339	(31,658)	20,681	0	909,330	882,845
##############	913,410	21,501	53,631	(32,130)	21,501	50,552	(30,286)	20,266	0	913,410	860,977
##############	920,199	21,777	53,413	(31,636)	21,777	48,880	(28,951)	19,929	0	920,199	842,112
##############	927,844	22,172	53,230	(31,058)	22,172	47,294	(27,595)	19,699	0	927,844	824,377
##############	936,460	22,639	53,062	(30,423)	22,639	45,772	(26,243)	19,529	0	936,460	807,799
##############	946,152	23,154	47,920	(24,766)	23,154	40,132	(20,741)	19,391	0	946,152	792,387
##############	962,581	23,838	49,022	(25,184)	23,838	39,859	(20,477)	19,382	0	962,581	782,666
##############	979,279	18,480	52,622	(34,142)	18,480	41,540	(26,952)	14,588	0	979,279	773,052
##############	987,532	21,937	52,357	(30,420)	21,937	40,127	(23,314)	16,813	0	987,532	756,861
##############	999,880	22,727	51,987	(29,260)	22,727	38,683	(21,772)	16,911	0	999,880	744,005
##############	1,014,034	23,502	51,568	(28,066)	23,502	37,254	(20,275)	16,979	0	1,014,034	732,560
##############	1,030,120	24,349	52,234	(27,885)	24,349	36,636	(19,558)	17,078	0	1,030,120	722,505
##############	1,047,100	25,000	53,477	(28,477)	25,000	36,415	(19,391)	17,024	0	1,047,100	713,024
##############	1,064,174	25,576	55,255	(29,679)	25,576	36,530	(19,621)	16,909	0	1,064,174	703,544
##############	1,080,680	26,122	56,549	(30,427)	26,122	36,297	(19,530)	16,767	0	1,080,680	693,647
##############	1,097,099	26,917	56,870	(29,953)	26,917	35,440	(18,666)	16,774	0	1,097,099	683,676
##############	1,114,761	27,870	55,161	(27,291)	27,870	33,373	(16,512)	16,861	0	1,114,761	674,449
##############	1,136,148	28,781	55,252	(26,471)	28,781	32,455	(15,549)	16,906	0	1,136,148	667,367
##############	1,159,395	29,835	56,761	(26,926)	29,835	32,370	(15,356)	17,014	0	1,159,395	661,187
##############	1,183,153	31,323	55,509	(24,186)	31,323	30,734	(13,391)	17,343	0	1,183,153	655,083
##############	1,210,956	32,854	58,040	(25,186)	32,854	31,199	(13,539)	17,660	0	1,210,956	650,949
##############	1,238,882	34,292	60,965	(26,673)	34,292	31,817	(13,920)	17,897	0	1,238,882	646,563
##############	1,266,282	36,294	62,332	(26,038)	36,294	31,583	(13,193)	18,390	0	1,266,282	641,615
##############	1,295,487	38,095	58,116	(20,021)	38,095	28,589	(9,849)	18,740	0	1,295,487	637,294
##############	1,332,628	40,099	58,882	(18,783)	40,099	28,122	(8,971)	19,151	0	1,332,628	636,471
##############	1,372,732	42,076	59,600	(17,524)	42,076	27,636	(8,126)	19,510	0	1,372,732	636,529
##############	1,415,973	44,145	54,805	(10,660)	44,145	24,673	(4,799)	19,874	0	1,415,973	637,456
##############	1,468,765	46,270	57,749	(11,479)	46,270	25,241	(5,017)	20,224	0	1,468,765	641,963
##############	1,523,053	48,610	61,945	(13,335)	48,610	26,286	(5,659)	20,627	0	1,523,053	646,302
##############	1,577,593	51,763	65,454	(13,691)	51,763	26,966	(5,641)	21,325	0	1,577,593	649,947

Odyssey ADVISORS
East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080
West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical & Life Insurance - Partial Funding

Measurement Date	Number of Retirees, Spouses & Surviving Spouses	Total OPEB Liability	Present Value at 3.00% of Total OPEB Liability	Employer Share of Premiums / Claims including "implicit cost"	Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"
December 31, 2017	12	900,917	900,917	53,183	53,183
December 31, 2018	11	909,330	882,845	53,909	52,339
December 31, 2019	11	913,410	860,977	53,631	50,552
December 31, 2020	10	920,199	842,112	53,413	48,880
December 31, 2021	10	927,844	824,377	53,230	47,294
December 31, 2022	9	936,460	807,799	53,062	45,772
December 31, 2023	9	946,152	792,387	47,920	40,132
December 31, 2024	8	962,581	782,666	49,022	39,859
December 31, 2025	8	979,279	773,052	52,622	41,540
December 31, 2026	8	987,532	756,861	52,357	40,127
December 31, 2027	8	999,880	744,005	51,987	38,683
December 31, 2028	7	1,014,034	732,560	51,568	37,254
December 31, 2029	7	1,030,120	722,505	52,234	36,636
December 31, 2030	7	1,047,100	713,024	53,477	36,415
December 31, 2031	6	1,064,174	703,544	55,255	36,530
December 31, 2032	6	1,080,680	693,647	56,549	36,297
December 31, 2033	6	1,097,099	683,676	56,870	35,440
December 31, 2034	6	1,114,761	674,449	55,161	33,373
December 31, 2035	5	1,136,148	667,367	55,252	32,455
December 31, 2036	5	1,159,395	661,187	56,761	32,370
December 31, 2037	5	1,183,153	655,083	55,509	30,734
December 31, 2038	5	1,210,956	650,949	58,040	31,199
December 31, 2039	5	1,238,882	646,563	60,965	31,817
December 31, 2040	4	1,266,282	641,615	62,332	31,583
December 31, 2041	4	1,295,487	637,294	58,116	28,589
December 31, 2042	4	1,332,628	636,471	58,882	28,122
December 31, 2043	4	1,372,732	636,529	59,600	27,636
December 31, 2044	4	1,415,973	637,456	54,805	24,673
December 31, 2045	4	1,468,765	641,963	57,749	25,241
December 31, 2046	4	1,523,053	646,302	61,945	26,286
December 31, 2047	4	1,577,593	649,947	65,454	26,966
December 31, 2048	4	1,634,029	653,591	68,493	27,396
December 31, 2049	4	1,692,572	657,288	68,218	26,492
December 31, 2050	4	1,757,152	662,492	70,728	26,666
December 31, 2051	4	1,825,199	668,105	73,166	26,782
December 31, 2052	4	1,896,970	674,152	72,946	25,924
December 31, 2053	4	1,975,736	681,693	75,567	26,073
December 31, 2054	4	2,058,886	689,692	78,451	26,280
December 31, 2055	4	2,146,366	698,054	81,347	26,456
December 31, 2056	4	2,238,878	706,934	84,589	26,709

East Coast
11 Hayward Ave, Building 4
Colchester, CT 06415
(860) 537-9080

West Coast
1350 E. Flamingo Road, Suite 254
Las Vegas, NV 89119
(702) 979-2880

EXHIBIT F

GLOSSARY

Accrual Accounting - A system of accounting in which revenues are recorded when earned and outlays are recorded when goods are received or services performed, even though the actual receipt of revenues and payment for goods or services may occur, in whole or in part, at a different time.

Actuarially Determined Contribution – Amount of funding required annually to fully fund plan benefits. Determined by the actuary using a consistent methodology.

Amortization – Allows the recognition of liability over a fixed period of time.

Cash Basis Accounting - A system of accounting in which revenues are recorded when received and outlays are recorded when payment is made.

Deferred Inflows/Outflows of Resources – Amounts arising from experience gains and losses that have not been recognized into the OPEB Expense, but will be recognized in the future.

Discount Rate – The interest rate used to calculate the present value of future cash flows. Under GASB 75, the rate should be the expected long term rate of return on investments for a plan that is being fully funded, the 20 year municipal bond index for a pay-as-you-go plan, and a blend of the two rates for a plan that is being partially funded.

Fiduciary Net Position – The value of cash, investments, other assets and property belonging to an OPEB trust.

GASB - Government Accounting Standards Board. "The Governmental Accounting Standards Board (GASB) was organized in 1984 by the Financial Accounting Foundation (FAF) to establish standards of financial accounting and reporting for state and local governmental entities. Its standards guide the preparation of external financial reports of those entities."

Implicit Subsidy – The liability that arises because retirees who are not eligible for Medicare are charged the same premium as active employees even though their actual medical costs are higher on average.

Irrevocable Contribution – The transfer of assets to a qualified trust in which assets may only be withdrawn for the purpose of providing retiree other post employment benefits.

EXHIBIT F

GLOSSARY
(continued)

Net OPEB Liability (NOL) – Total OPEB Liability less the Fiduciary Net Position.

Other Post Employment Benefits (OPEB) – Benefits that an employee will begin to receive at the start of retirement. This does not include pension benefits paid to the retired employee.

OPEB Trust – An entity which holds assets for the sole purpose of funding OPEB. All contributions and earning within this entity must be irrevocable and protected from creditors.

Pay-as-you-go funding – Paying benefits (such as pensions or OPEB) on a cash basis, with no money set aside for future liabilities which are already incurred.

Service Cost - The actuarially determined present value contribution needed to fund benefits which are earned for employee service rendered during the current year. Service cost depends on many factors, including the interest rate used to discount future cashflows, and expected inflation.

Total OPEB Liability (TOL) - That portion, as determined by the Individual Entry Age Normal Actuarial Cost Method, of the Actuarial Present Value of benefits and expenses which are not provided for by future Service Costs.

CAMBRIDGE REDEVELOPMENT AUTHORITY

Budget vs. Actuals
January 2018

	Total	
	Actual	Budget
Income		
4000 Income		
4200 Operating Revenue		
4210 Grants		255,000
4220 Proceeds from sale of development rights		431,000
4230 Reimbursed Expenses		100,000
4240 Rental Income		
4243 Parcel Six Rental Space	200	15,000
Total 4240 Rental Income	**$200**	**$15,000**
4250 Other		
Total 4200 Operating Revenue	**$200**	**$801,000**
4300 Other Income		
4310 Dividend Income	9,257	90,000
4320 Interest Income	14,076	490,000
Total 4300 Other Income	**$23,333**	**$580,000**
Total 4000 Income	**$23,533**	**$1,381,000**
Total Income	**$23,533**	**$1,381,000**
Gross Profit	**$23,533**	**$1,381,000**
Expenses		
6000 Operating Expenses		
6100 Personnel		
6110 Salaries	49,523	465,000
6120 Payroll Taxes		
6121 Medicare & OASDI (SS)	803	9,200
6123 Unemployment & MA Health Ins	216	800
Total 6120 Payroll Taxes	**$1,019**	**$10,000**
6130 Personnel and Fringe Benefits		
6131 Insurance - Dental	1,109	7,000
6132 Insurance - Medical (for Employees)	10,196	55,000
6133 Pension Contribution (Employees & Retirees)		82,100
6134 T Subsidy	695	6,000
6135 Workers Comp & Disability Insurance	899	1,000
Total 6130 Personnel and Fringe Benefits	**$12,899**	**$151,100**
6140 Insurance - Medical (for Retirees, Survivors)	12,737	55,000
6150 OPEB Account Contribution		7,000
Total 6100 Personnel	**$76,178**	**$688,100**

	Total	
	Actual	Budget
6200 Office		
6210 Community Outreach		
6211 Materials		2,000
6212 Public Workshops		2,000
6213 Other	804	6,000
Total 6210 Community Outreach	**$804**	**$10,000**
6220 Marketing & Professional Development		
6221 Advertising		1,000
6222 Conferences and Training		12,500
6223 Dues and Membership	2,050	6,000
6224 Meals		500
6226 Staff Development		1,000
6227 Subscriptions	21	300
6228 Travel		300
Total 6220 Marketing & Professional Development	**$2,071**	**$21,600**
6230 Insurance		
6231 Art and Equipment	5,675	5,700
6232 Commercial Liability	3,371	3,700
6233 Special Risk	2,211	5,300
Total 6230 Insurance	**$11,257**	**$14,700**
6240 Office Equipment		
6241 Equipment Lease	358	4,300
6242 Equipment Purchase (computers, etc.)		1,500
6423 Furniture		1,000
Total 6240 Office Equipment	**$358**	**$6,800**
6250 Office Space		
6251 Archives (Iron Mountain)	452	6,000
6252 Office Rent	8,597	101,300
6253 Office Utilities	250	4,200
6254 Other Rental Space	4,788	5,000
6255 Parking		400
6256 Repairs and Maintenance		300
6257 Relocation	1,885	10,000
Total 6250 Office Space	**$15,972**	**$127,200**
6260 Office Management		
6261 Board Meeting Expenses	73	900
6263 Office Supplies	99	2,000
6264 Postage and Delivery	25	300
6265 Printing and Reproduction		1,000
6266 Software	294	1,000
6267 Payroll Services	161	1,100
6268 Financial Service Charges		200
Total 6260 Office Management	**$653**	**$6,500**
6270 Telecommunications		
6271 Internet	269	3,200
6272 Mobile	11	2,900
6273 Telephone	218	2,400
6274 Website & Email Hosting	43	800
6275 Information Technology	421	5,000
Total 6270 Telecommunications	**$962**	**$14,300**
Total 6200 Office	**$32,076**	**$201,100**

	Total	
	Actual	Budget
6300 Property Management		
6310 Contract Work		5,000
6320 Landscaping Maintenance		30,000
6330 Repairs		5,000
6340 Snow Removal	2,760	30,000
6350 Utilities		
6351 Gas & Electric		6,000
Total 6350 Utilities	$0	$6,000
6360 Other		
Total 6300 Property Management	$2,760	$76,000
Total 6000 Operating Expenses	$111,014	$965,200
7000 Professional Services		
7001 Construction Management		20,000
7002 Design - Architects		40,000
7003 Design - Landscape Architects		40,000
7004 Engineers		5,000
7005 Legal		8,333
7006 Real Estate & Finance		30,000
7007 Planning and Policy		60,000
7008 Retail Management / Wayfinding		
7009 Accounting		20,100
7010 Marketing / Graphic Design		10,000
7011 Temp and Contract Labor	1,500	5,000
7012 Web Design / GIS	1,918	5,000
7013 Land and Building Surveys		5,000
7014 Records Management / Archivist		20,000
7015 Energy & Environmental Planning		2,000
7017 Transportation		165,000
7018 Investment Services	22,186	151,000
7019 Workforce / Economic Development		40,000
Total 7000 Professional Services	$25,603	$626,433
8000 Redevelopment Investments		
8100 Capital Costs		$255,000
8200 Forward Fund		$200,000
8400 Foundry Design		$2,000,000
8500 KSTEP Fund		
8600 Affordable Housing Loan		$100,000
Total 8000 Redevelopment Investments	$0	$2,555,000
Total Expenses	$136,617	$4,146,633
Net Operating Income	-$113,084	-$2,765,633
Net Income	-$113,084	-$2,765,633

CAMBRIDGE
REDEVELOPMENT
AUTHORITY