The Central Artery Environmental Oversight Committee Boston, Massachusetts

Introduction

The Central Artery/Tunnel Project (CA/T), located in downtown Boston, Massachusetts, has been described as the world's largest public works project. Part of the interest surrounding the Project involves the many innovative approaches used to reach the Project's goals. One such innovative approach was the creation of the Central Artery Environmental Oversight Committee (EOC).

This document strives to explain the EOC's role in tracking the implementation of environmental commitments that have been made, during the construction of the CA/T Project, with the hope of sharing some experiences that have resulted from the involvement of such an oversight body. The Federal Highway Administration wishes to make this information available to project proponents whose projects might benefit from the use of the same or similar techniques.

The EOC monitors and encourages the implementation of the environmental commitments made by the Commonwealth of Massachusetts in connection with Boston's CA/T Project. Best known as Boston's Big Dig, the CA/T Project began construction in 1991 but the planning and decision-making that culminated in its approval took more than a decade. By the beginning of 2006, Project construction was 98% complete with the remaining work consisting primarily of surface restoration. The EOC expects to conclude its work in June 2006 with individual members continuing to be involved in any commitments that remain to be completed.



The Central Artery/Tunnel Project Map

To understand the role of the EOC and its applicability to other public works projects, it is helpful to look first at the scope of the CA/T Project and the context within which it was approved.

The CA/T Project replaced an aging, elevated Interstate 93 (I-93) that had separated Boston's downtown from its waterfront and an entire neighborhood from the rest of the city with a wider, mostly underground highway; connected this underground highway to I-93 north of Boston via a new cablestayed bridge over the Charles River; and extended the Massachusetts Turnpike (I-90) west through a new tunnel under Boston Harbor to its terminus at Logan International Airport, Although only 7.2 miles in length, the CA/T Project is the most complex and ambitious highway project ever undertaken in the heart of an American city, and its benefits to the Boston region extend well beyond improvements to traffic flow.

Boston's elevated Central Artery was built in the 1950s to serve 75,000 vehicles daily. By the 1990's, it was badly in need of repair, carrying 190,000 vehicles daily and creating 10-hour traffic jams with frequent accidents.¹ When constructed, it cut a wide swath through the city, destroying homes and businesses in the name of progress. By the 1960s, there was growing resistance to such disruptive projects; and in the 1970s, a controversy over proposed new highway expansions led then Governor Francis Sargent to halt all work while the region developed a comprehensive transportation plan. One result of this plan was the rechanneling of highway funds into public transit projects along the proposed new highway corridors.

The idea to depress Boston's Central Artery and to construct a third harbor tunnel to Logan Airport emerged in 1971, but there was no consensus for one or the other. The one person most responsible for keeping both ideas alive and pursuing federal financial support for them was Frederick Salvucci, then Secretary of Transportation for Governor Michael Dukakis.² Governor Dukakis lost the election in 1978, and it was not until he was reelected in 1982 with Frederick Salvucci again as his transportation secretary that serious study and planning began for a project combining both ideas.

Citizens had become more actively engaged in transportation planning during the 1970s and 80s largely in response to the disruptive road building practices of the 1950s and 60s. To gain the support that was needed to build a combined Central Artery/Third Harbor Tunnel Project

(the Project), planners worked throughout the 1980s with business and community groups, political leaders and permitting agencies to reach a consensus on how the Project would be built. Their challenge was to determine how to construct it through the heart of Boston without damaging its economy, environment and quality of life. This decade of planning and consensus-building led to solutions and agreements that were recorded in the January 1991 Final



SEIS/R and confirmed in the state and federal approval documents. They included such provisions as maintaining access for residents and businesses, encouraging use of public transit, managing dust, odors, noise and vibrations and, in the end, restoring the surface with new streets, sidewalks and parks. The EOC grew out of a conviction that an oversight committee would be needed to ensure the implementation of the solutions and agreements that were essential to maintaining support for the Project in the years ahead.

I. The Formation of the EOC

By the end of 1990, outgoing Governor Dukakis and Transportation Secretary Salvucci had achieved near-consensus and FSEIR approval for the CA/T Project. Final federal approvals and funding were still pending along with the resolution of some outstanding design and mitigation

issues. When a new Governor, William Weld, took office in January 1991, the business community, and environmental and political leaders who had helped achieve consensus for the Project were concerned that the new state administration might not be prepared to move the Project forward.

Robert Weinberg, a community and business leader who had been chairman of the Massachusetts Port Authority under Governor Dukakis and an advocate of the Project, saw three things that needed to be done to ensure that the new administration maintained support for the Project and made its completion a priority. First, the organized support of the business community was essential. Second, it was important to create a broad-based coalition to bring all parties to the table to resolve the outstanding issues. Third, it was important to find a way to catalogue and track all the mitigation commitments.³

Downtown Boston property owners with vital interests in the CA/T Project had formed the Artery Business Committee in 1989 to focus on successful implementation of the Project and protect their own interests.⁴ Then in December 1990, Robert Weinberg and the Artery Business Committee's Executive Director William Coughlin joined the leaders of labor, community and environmental organizations to form Move Massachusetts 2000 (Move Mass). This was the broadbased coalition that was needed to bring everyone to the table to help identify and



resolve a variety of issues surrounding the Project. Finally, to address the third need with regard to the mitigation commitments, the environmental leaders who were part of Move Mass negotiated an agreement with Governor Weld's cabinet secretaries for transportation and the environment to form what would become the EOC.⁵ This agreement was signed on June 6, 1991 by the presidents of The Boston GreenSpace Alliance, 1000 Friends of Massachusetts (a land use and transportation organization), and Move Mass with Governor Weld's Secretary of Transportation Richard Taylor and Secretary of Environmental Affairs Susan Tierney.

Robert O'Brien, a founding member of Move Mass and the Central Artery EOC described the transition to a new state administration as a battle over the public's perception of the Project and a battle for political, over legal, solutions to outstanding areas of disagreement. The EOC was formed partly to seek consensus on issues that might result in legal challenges to the Project on environmental grounds.⁶ William Constable, also a founding member and organizer of the EOC, described it as a focus on the wider public benefits of the Project in order to maintain community and public support for it.⁷

Robert Weinberg, who first proposed the formation of a group to oversee the Project's long list of environmental commitments, said that four questions drove the formation of the EOC:

- 1. How will the people implementing the Project know what the commitments are?
- 2. How will people track the commitments over time and give the impression that they care about them?
- 3. How will people modify them over time when necessary and appropriate?
- 4. What will people do if the Project is not keeping the commitments?⁸

He continues to believe that mitigation is necessary to reach decisions and gain approval of any large project and that there needs to be a bureaucratic mechanism to know what commitments exist and what to do about them. He cited a master plan for Boston's Logan International Airport as the model for creating the EOC. The Logan plan became its board of directors' guide for decision-making and improved the airport's responsiveness to its impacted neighbors. To create something similar for the CA/T Project, Mr. Weinberg saw the need for a group to negotiate such issues with the Project. He believed that if all who had a stake in the Project's environmental commitments sat at one table, they would have to consider one another's needs and seek compromises, and they would become a powerful lobby for those needs. By keeping a focus on the Project's environmental commitments and helping to resolve any issues surrounding them, such a group would help to maintain support for the Project in the years ahead.⁹

II. The Composition and Purpose of the EOC

The signatories to the June 6, 1991 agreement to form an environmental oversight committee met later that year to discuss the committee's membership and the need for ex-officio, non-voting members from the public agencies. They identified committee members from four other

organizations concerned with the Project's environmental commitments, and later added one additional member to represent the Spectacle Island Park Advisory Committee, which focused on a specific set of Project commitments. The original ex-officio members represented the two cabinet offices, the CA/T Project and the regional transit authority. The City of Boston was added later that year.

As part of the agreement, the CA/T Project was required to prepare an implementation plan containing a list of all the air quality, traffic management, transit and open space commitments that had been made with respect to the Project, including the names of those responsible for completion of each

Central Artery Environmental Oversight Committee 1992

Committee Member Organizations:

Boston GreenSpace Alliance 1000 Friends of Massachusetts Move Massachusetts 2000 Metropolitan Area Planning Council Massachusetts Bay Transportation Authority Advisory Board Artery Business Committee (Charles River Crossing) Bridge Design Review Committee Spectacle Island Park Advisory Committee

Ex-Officio Member Agencies:

Executive Office of Transportation Massachusetts Highway Department/CA/T Project Executive Office of Environmental Affairs Massachusetts Bay Transportation Authority (MBTA) Boston Transportation Department

commitment, dates for completion and appropriate milestones. The committee would report to the secretaries of transportation and environmental affairs "regarding compliance with the commitments and schedule in the implementation plan." The two cabinet secretaries had also agreed to take certain actions to address outstanding issues that posed legal threats to the Project, principally questions about the impact of the new highway on public transit and air quality. They appointed the committee and ex-officio members, and agreed to provide limited funding to the committee for staffing purposes. The funding to be provided by the two executive offices would ensure the committee's independence from the Project itself.

The committee and its ex-officio members began meeting in November 1991 with initial administrative assistance from the Executive Office of Transportation (EOT). David Soule, who had been asked to serve on the committee in his position as Executive Director of Boston's Metropolitan Area Planning Council (MAPC), was also asked to house the committee's part-time staff person. As the regional planning agency, MAPC would become the committee's fiscal agent and pay its staff person through a third party contract. David Soule suggests today that the committee's success and legitimacy came from its sustained interest in the commitments over time, which he believes would not have happened had the responsibility to oversee commitment implementation been given to a public agency.¹⁰ The members of the committee agreed to serve as volunteers to represent their organizations' interests in the Project and its environmental commitments. The ex-officio members served as each agency's primary contact for the committee. Three of the original seven committee members served throughout its tenure, from 1992 to 2006, including Robert Tuchmann who served as chair from 1993-2006, and Robert O'Brien and William Constable who are mentioned above as active in its formation. Mark Primack, then Executive Director of the Boston GreenSpace Alliance, served as president of Move Mass and the first chair of the EOC in 1992. He left in early 1993 to work on related issues in the state transportation office. The other committee members served until they left their positions with the represented organization and were replaced on the committee coordinator in April 1992, became its full-time director in 1997 and continued to serve for the life of the committee. This continuity of membership, chairmanship and staff has been critical to the committee's success and cannot be underestimated.

MISSION STATEMENT – Approved February 25, 1992

The Central Artery Environmental Oversight Committee is an independent advisory committee established to monitor progress by the Central Artery/Third Harbor Tunnel Project (CA/T), the Executive Office of Transportation and Construction (EOTC) and the Executive Office of Environmental Affairs (EOEA) toward implementing the environmental, transportation and land use mitigation commitments (the "Commitments") made by the Commonwealth in connection with the CA/T, and to encourage appropriate resolution of challenges which arise in accomplishing mitigation. The activities of the Committee shall include the following:

- Monitoring: The Committee will receive and analyze relevant information concerning the CA/T mitigation commitments, including the extent to which projected schedules are consistent with the Commitments, any alterations to the schedules or the mitigation, and any unforeseen impacts caused by specific mitigation activities. The source of information will be: a) periodic reports by CA/T as to the status and prospects for successful fulfillment of each Commitment; b) prompt information to the Committee by CA/T, EOTC and EOEA, either at the initiative of those agencies or request of the Committee, with respect to any significant changes concerning the Commitments; and c) information provided by community groups, environmental advocacy organizations, or other governmental organizations; these groups will be encouraged to contact the Committee concerning perceived problems with the Commitments.
- Outreach: The Committee shall solicit and maintain communications with community groups, environmental organizations and other interested parties concerning the Commitments, encouraging each to use the Committee as a clearing-house for concerns about the progress toward the Commitments or any impediments that may arise. The Committee shall endeavor to: a) inform such groups of substantial changes in the Commitments; b) help articulate any significant problems with the Commitments; and c) communicate such problems to CA/T or relevant agencies.
- Resolution: Through frank discussion with CAT, EOTC, EOEA and appropriate groups, the Committee will examine any mitigation issues which it uncovers or has presented to it, and attempt to encourage an appropriate resolution of substantive problems. Although the Committee shall not determine the merits of any problem or resolution proposed by others, it shall communicate potential resolutions for both specific mitigation actions and relevant public safety to both public and private sectors.

From the beginning, it was made clear to the ex-officio members that the committee's coordinator would report solely to the committee members, principally to its chair. She was to serve as an independent resource with specific responsibilities to:

- Act as a liaison between the Committee and other mitigation committees; local, state and federal agencies; business and community groups; and other interested parties;
- Track the various environmental commitments the state has made in connection with the CA/T Project, including the nature of each commitment as well as any relevant dead-

lines, and keep the Committee and other interested parties apprised of the status of each commitment;

- Research information relevant to the Project and its environmental commitments, brief Committee members on important findings, and develop recommendations for resolution of outstanding commitment issues as needed;
- Respond to requests for information and provide reports of progress with the environmental commitments;
- Provide administrative assistance to the Committee, including written and oral communications and meeting planning and implementation.

The committee's mission statement and its coordinator's original responsibilities noted above best define the committee's purpose. Twelve years later, the EOC provided the following summary of its purpose in an annual report:

The EOC continues to serve as a resource on hundreds of commitments detailed in the federal and state documents that were required for Project approval. The EOC communicates with all stakeholders, monitors and reports on commitment implementation, and serves as a clearing-house for issues that arise. Through frank discussions, the EOC identifies and articulates sub-stantive issues surrounding the commitments and encourages their resolution. This combination of Project support and independent oversight has helped to achieve the mitigation and its bene-fits, and serves as a model for future infrastructure projects.¹

III. The EOC's Relationship to the Project and other Involved Parties on the Project

The committee's relationship to the CA/T Project and others involved with the Project has changed over time as state administrations and the Project's leadership have changed, yet the committee's approach has remained consistent with its mission. Stable committee leadership and staff have given it a continuity shared by few other organizations or agencies over the life of the Project.

When the formation and purpose of the committee were announced by the two cabinet secretaries on June 8, 1991, many supporters and critics of the CA/T Project were skeptical of its ability to succeed. From the perspective of the Project and its lead agencies (the Executive Office of Transportation and the Massachusetts Highway Department), it was one more oversight group to which the Project would have to report. Early support came from the Executive Office of Environmental Affairs, which saw the value in having an independent monitor of the environmental commitments. Some individuals and organizations that still opposed the Project on environmental grounds questioned whether the committee was likely to compromise on the commitments given the varying priorities of its members. Finally, some organizations that had been involved in certain areas of Project consensus preferred to work directly with the Project on their own mitigation concerns. They included a number of community and environmental advocacy groups that were later encouraged to contact the committee with their concerns about the commitments.

As an organization, the EOC had to strike an equal balance between concern for the Project's environmental commitments and its continued progress. It gained credibility through its detailed knowledge of the commitments, consistent respect for them, and ability to look at disputes about them in an objective way. It gradually gained the trust of Project officials and other parties involved with the Project as an organization that was vigilant and responsive, and primarily interested in resolving commitment issues without an independent agenda such as those of its member groups. Its chair developed a reputation as an impartial and diplomatic leader. Its director

had come without a vested interest in the Project or any of its commitments, but with experience in transportation and environmental issues and a history of community involvement at the state, regional and local levels. Once the EOC had developed a track record, representatives of community and environmental organizations, and even non-Project state and municipal officials contacted it with increasing frequency. They sought information on the documentation of specific commitments, and in some cases, asked that their concerns be addressed by the EOC at its regular meetings with Project managers. Interest groups continued to work directly with the Project when they had access, but the EOC brought increased credibility, visibility and attention to their issues.



An EOC public meeting on surface designs

While much of the EOC director's work was conducted through communication with Project staff and other involved parties, the primary focus of the committee's work was its public meetings, which were held bi-monthly in a neutral location and open to all. Meeting topics were identified by the director and committee members. Questions were sent to the Project and any other relevant agencies in advance of the public meetings, and a prelimi-

nary meeting was held to tell the Project what to expect. In many cases, the upcoming public meeting would be enough of an incentive for the Project to address identified issues so that it could report progress at the public meeting. Sometimes, issues got resolved in the process of the dialogue that occurred before or after the meeting. If not, the public meeting would serve to answer questions and clarify the issues, which would be brought up again at future meetings if they still had not been resolved.¹¹

Robert Ruzzo, who served as an ex-officio member of the EOC from 1993 to 1999, said that the Project often used the committee as a sounding board.¹² There were multiple commitment source documents, including but not limited to the FSEIS/R, the MEPA (Massachusetts Environmental Policy Act) Certificate and the project proponent's Section 61 Finding (final statement of actions), the FHWA Record of Decision, and multiple legal agreements and permits. The commitment language, such as a requirement that the Project cover open highway ramps in downtown Boston, differed from one document to another and had to be adjusted to proposed project changes or changes in the field. The EOC weighed-in both in private and in public to help define the commitments and apply pressure if it determined that a commitment was being ignored or needed more attention. In this way, the EOC was a political pressure point and played a role in defining the commitments.¹³ It also made sure that funding for later commitments, such as the surface restoration, was identified and preserved in Project budgets from the beginning.¹⁴

The EOC eventually gained a reputation outside the Project for being the one place you could go to know what the commitments were and to gain answers to your questions.¹⁵ One long-time participant said that she and others relied on the EOC to know the facts.¹⁶ Another said that she and her neighbors never could have found the specific commitment text they needed without the help of the EOC's director, and the EOC's meetings gave them an opportunity to talk directly with the head of the Massachusetts Turnpike Authority about them.¹⁷ The EOC's public meetings were a place to voice concerns and air issues, with the goal being mutual trust and understanding, and if not achieved, an agreement to work harder toward that end. While not the only

voice given the Project's extensive outreach program, the EOC brought together a cross-section of interests and provided a forum for the Project and concerned parties to talk about project-wide issues and reach a consensus that might not have been possible when the Project was dealing with just one neighborhood or organization that saw an issue as black and white.¹⁸

Edward McCormack, who has been the Project's liaison to the EOC since 2001, said that it became a built-in function of the Project to come before the EOC and address its questions and issues, as well as to provide quarterly commitment status reports to the EOC. The status reports required the Project's managers to continue to focus on the Project's obligations to meet the environmental commitments. Within the Project, the EOC helped to ease the considerable tension between those responsible for its construction and those responsible for mitigation and community outreach. The latter could point to the EOC as having iden-



Construction near residential buildings in the North End

tified and clarified issues that had to be addressed by those responsible for the Project's construction.¹⁹

Finally, while the committee's relationship to the Project's managers has been constructive, they did not always accept or cooperate with it to the extent that the framers of the EOC had anticipated. The EOC was conceived as an early alert system, to identify issues that could hurt or delay the Project and help to resolve them. However, there have been five state administrations and almost as many changes in the Project's leadership since 1991. The Project was conceived, designed and approved by an administration that promised high levels of information and public participation in decision-making. The administrations that built the Project have been more reluctant to share information or accept a participatory process, particularly as the Project's costs and schedule pressures have increased. The EOC had to become proactive in seeking information and working to influence the Project's decisions. It sometimes had to accept changes after the fact. However, the Project continued to take its substantive commitments seriously and the EOC has played a role in achieving them.

IV. Steps in the Oversight of the Implementation of the Environmental Commitments

The Project's Commitment Tracking System:

In 1991, the Project undertook the development of a Commitment Tracking System (CTS) to fulfill a mandate in its federal Record of Decision.²⁰ The CTS consisted of a comprehensive database and reporting mechanism to track and record all the commitments required in the Project's many approval documents. It became critical to the Project's success in implementing its commitments and to the EOC's ability to oversee them.

As part of a 1995 Process Review of the Project's environmental monitoring program, FHWA representatives interviewed Project staff and others, including the EOC director. One of the subsequent recommendations was that the Project publish an updated commitment list bi-

annually to reflect the most recent project changes, additions and new source documents. A complete updated list was published in 1997 and made available to departments and agencies that were responsible for commitment implementation, as well as to oversight organizations and public interest groups.²¹ It contained 1,344 paraphrased commitments listed by keyword, category, location and responsible party. Source documents for each commitment were included with the paraphrased text. A representative page from the 1997 published list of commitments is included as *Appendix A* to this report.

After 1997, policy changes and an intense focus on Project cost-containment led to significant reductions in the Project's CTS staff. The full list was no longer published, but it was still possible to obtain print-outs of selected lists by keywords. A dedicated, but much smaller environmental and legal staff continues to maintain the system today although the same level of attention to updates that reflect all project changes and new permits has not been possible.

The CTS is unique to the CA/T Project and serves as a model for future infrastructure projects. Barry Friswold, who led the Project's effort to complete the database, said that the CTS was useful as a tool to ensure that all requirements were included in the construction contracts (as required by FHWA), as a valuable reference as project staff kept changing, and as a place to see everything that was said about a given topic from many different source documents. It was also a tool for reporting environmental commitment progress to the EOC and others.²² The Project shared its reports to the EOC with key federal, state and municipal officials and the EOC sent copies to others who expressed an interest.

The EOC's role in the CTS:

From 1992-97, the EOC director reviewed countless drafts of the paraphrased text for the CTS commitments that were environmental in nature, commenting and contributing to the text and source document listings. This iterative process helped the EOC director to expand her knowledge of the environmental commitments and the source documents, and her comments helped the Project's CTS team to finalize the paraphrased text. Project staff was under pressure not to expand the mitigation obligations, particularly in cases where source documents contained conflicting text. The reviews of the commitment summaries both by the EOC director and at EOC meetings helped to support and improve the text where there were questions about commitment intent.

During FHWA's 1995 Process Review interviews, the EOC director explained her involvement in identifying and clarifying the environmental commitments, as well as her role in monitoring their implementation by the Project. The review team concluded that "the Environmental Oversight Committee appears to serve a worthwhile purpose as a source of review of certain environmental commitments independent from the 'highway agencies' and their consultants. We support this committee's role and the existing project funding of its duties."²³ (The assumption of "project funding" was an error that was subsequently corrected in the report.)

The Project's Commitment Status Reports to the EOC:

The EOC's 1991 agreement with the two cabinet secretaries included a statement that the CA/T Project would prepare an implementation plan containing a list of all the air quality, traffic management, transit and open space commitments that had been made with respect to the Project, including the names of those responsible for completion of each commitment and appropriate milestones. Early drafts of this plan that preceded the development of the CTS took the form of Commitment Status Reports, and listed broadly-stated commitments with their major source documents. For example:

Commitment: Dust and odor control

Source: FSEIR: Construction Mitigation Appendix; Part 1, Ch. 20; Part IV, Ch. 2; and Record of Decision

Status: Standard Project construction control specifications to be included in all construction contracts have been written to cover this (Div. I, Section 7.01B).

Responsible agency: Massachusetts Highway Department²⁴



Contractors took dust control measures

The Project continued to provide Commitment Status Reports to the EOC on a quarterly basis through 2005. (A sample page is included as **Appendix B**.) However, after completion of the CTS, the Project no longer would report on broadly-stated commitments that might suggest open-ended requirements. Of the 1,344 listed commitments in the 1997 CTS, the EOC director had identified over 600 that fell within the four environmental categories monitored by the EOC.²⁵ For example, the CTS listed 16 specific commitments to implement the broader commitment to dust and odor control. (As an illustration, see 4 of them on the CTS page in Appendix A.)

This level of detail was crucial to the Project's ability to use the CTS as a tool for adding specifics to its construction contracts, but it changed the nature of the Project's Commitment Status Reports to the EOC. The EOC director was asked to choose one or two of the most representative commitments for each broad category in order to keep the status reports to a manageable number. For example, the reports included:

Commitment: "Monitor air quality impacts during construction, including contractor compliance to dust reducing measures. Monitoring program to be agreed upon by Air Quality MOU parties. Mitigation and RE staff to monitor impacts; adjust construction mitigation measures, as warranted."²⁶

Even the paraphrased text in the CTS was not considered legally binding, but it closely matched the language in the source documents listed. The "status" columns in the reports to the EOC became increasingly lengthy and detailed. Producing them was a time consuming task, particularly given the Project's cautious approach to releasing information in writing. The reports did help to keep Project managers aware of the commitments and were useful for reporting to other public agencies. They helped to continue an iterative process with the EOC director, who commented on the draft reports and used them as a reference. However, since they represented only selected commitments and became highly detailed, EOC members found it hard to find the forest for the trees in them.

The EOC's Role in Overseeing Implementation of the Commitments:

The EOC had to focus on key commitments and the larger picture in order to accomplish its goals. One member saw as most valuable the director's distillation of all the environmental commitments into something manageable.²⁷ She continued to use more broadly-stated commitments for EOC reporting purposes, such as dust control, noise control, or as an example of an open space commitment, completion of the Spectacle Island Park. She kept records of the specific requirements, but did not track any that were found solely in private



Spectacle Island Park in 2005

legal agreements with abutters. There were also categories of environmental commitments that were being closely followed by other groups, such as the traffic management commitments of high interest to the City of Boston and the Artery Business Committee; air quality commitments implemented through the work of the interagency Construction Air Quality Committee; and open space commitments monitored by appointed park advisory committees. The EOC director tracked these commitments by communicating with, and when possible, participating in the other groups' meetings, and bringing any issues of concern to the EOC for further discussion with the Project. The EOC paid most attention to the commitments it identified as "orphans" because they were not followed by others or were at particular risk. These became the focus of articles in EOC newsletters, but its annual reports summarized all the environmental commitments and reported their statue with just ensuge detail to give the committee and ethers a committee.



EOC Annual Report

their status with just enough detail to give the committee and others a sense of the Project's overall progress toward meeting its commitments.

When the EOC director received a request for commitment information, she would draw on copies of the Project's paraphrased commitments, her own records and the details in the source documents to provide as complete and objective a response to a question as possible, always placing the information in the larger context. In this way, one neighborhood could see its particular concerns in the larger context and avoid overreaching in its requests to the Project. Over time, the EOC director was able to quickly turn around requests for information without the constraints faced by someone in a public agency. EOC members developed their own broad understanding of the commitments, relying on the director to access the details when needed.

Examples of actions taken by the EOC:

In addition to providing information and public meetings, the EOC acted to encourage commitment implementation in response to requests and at its own initiation. The four examples below illustrate a variety of commitment issues and actions, some short-term and others that continued for the life of the Project.

1. Community outreach and public participation during construction:

Commitment Summary: The Federal ROD required "the development of a comprehensive community outreach plan." Multiple chapters in the FSEIS/R described frequent coordination meetings with community groups and abutters to discuss and provide detailed information on work plans, schedules and procedures, and assured that the needs and interests of affected parties would be adequately addressed in construction planning and mitigation. The MEPA Certificate required the project proponent "to work diligently with all interested parties throughout the design, permitting and construction phases of the project to respond to and address, to the greatest extent possible, all legitimate concerns."

Issues and Actions: By 1994, the Project had developed an outreach program that included public service announcements, newsletters, press briefings, direct contact with abutters (primarily large businesses and hotels), and a 24-hour communications center with a hotline for complaints. Residents and small business owners were becoming increasingly vocal about the construction impacts and what they saw as a need for the Project to listen and respond to their complaints. The EOC teamed-up with the Move Mass coalition and wrote to Project Manager Peter Zuk to schedule a meeting to "focus on the method by which impacted community interests can consistently participate in aspects of the CA/T planning process that directly affect their interests both for the short term and the long term." A meeting was scheduled for April 26, 1994.

The conveners drafted questions for Project managers to consider in advance of the meeting, focusing on expressed concerns and the need for more information on the Project's outreach programs. They held a pre-meeting in early April with the Project managers for mitigation, construction, environmental affairs and design, and included the directors of Boston's transportation, development and environment departments. The pre-meeting participants developed plans for the larger meeting.

At the public meeting, guest speakers presented two case studies of successful public participation processes for Boston area projects. The CA/T Project had prepared a written summary and described its existing "Community Planning/Relations Process." EOC Chair Robert Tuchmann led the discussion. It became clear there was a mutual lack of trust between the Project and the community. The Project feared that community meetings would be used as forums to slow or stop its progress. Community members wanted to have a dialogue with the Project and regular meetings, and accused its managers of providing information to the general public but failing to tell



A community meeting with the CA/T Project

those most impacted where to go for information. They made a distinction between information and participation, and called for a systematic process for responding to their complaints and a greater dedication of resources to it. The meeting concluded with an agreement to form a working group to develop recommendations based on the discussion.

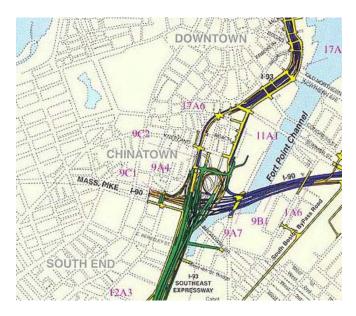
The EOC director then drafted a one page "Summary of CA/T Project Community Planning Process Issues." The working group convened in May, reviewed the summary and the Project's mitigation manager agreed to develop a response. His response took the form of a new draft "Public Participation Plan," which he sent to the EOC for distribution to all participants for comment. Following review and comment, the Project presented its new plan for discussion at an EOC meeting in October 1994. The plan divided the Project into clear geographical areas and, for each area, provided informational forums, working sessions, written updates, and regular abutter meetings. A kick-off meeting for the new plan took place in Boston's North End neighborhood later that month. A large group of residents and business owners listened and again voiced all of their concerns, but agreed to give the Project a chance to improve its outreach and two-way communications.

The Project's consensus-driven plan for public participation was just a beginning, but it set a framework for progress. While the Project's approach changed over time, and both the neighborhoods and the EOC had to remain proactive, working with each community throughout construction became an integral part of the Project's operations. The participation of the construction contractors in community meetings has served as a model for other projects. Fundamentally, it became clear to the Project that a well planned participatory program helped to address problems in a timely way and kept problems from repeating themselves as work moved on to other areas.

2. A traffic detour and the Chinatown neighborhood:

Commitment Summary: The Maintenance of Traffic Plan Appendix in the FSEIS/R stated that "the use of local roads for major detours will be allowed only when there is no viable alternative." The public process commitments discussed above also apply to this case.

Issue and Action: In the spring of 1996, a coalition of community organizations in Boston's Chinatown neighborhood came together to form the Chinatown CA/T Task Force. (Chinatown is located south of the old Central Artery and was most concerned about the potential for traffic, air quality and land use impacts.) On June 26, 1996, the two co-chairs of the task force wrote to then Secretary of Environmental



Affairs Trudy Coxe expressing outrage over a proposed Project plan to detour 9,000 vehicles a day through a part of Chinatown for about 6 years. They argued that the detour would clog the streets, threaten pedestrian and traffic safety, and increase air pollution and noise levels, particularly near one elementary school. They called upon the secretary to require more environmental study of the detour, writing three more letters to her over the next two months to make their case. The letters were copied to numerous elected officials, the EPA, Move Mass and the EOC. The press became involved and considerable public pressure was brought to bear on the Project and the City of Boston, whose transportation consultant had worked with the Project in designing the detour.

In early July, one of the community task force co-chairs asked to make a presentation at the next EOC meeting, which was scheduled for September 17. The EOC director explained the issues to the committee's chair, Robert Tuchmann. He supported the request and, in the mean-time, contacted the Artery Business Committee to see whether they and their independent traffic consultant could provide some assistance to the community.

CA/T Project Manager Peter Zuk wrote to Secretary Coxe on August 12 to respond to the four task force letters on "the Temporary Albany Street Detour." He stated that the plans represented a needed traffic mitigation measure and that further environmental review was unnecessary since the impacts had been addressed within the MEPA approved Maintenance of Traffic Plan and the Project's ongoing community participation process.

The EOC director put the task force co-chairs in contact with the Artery Business Committee (ABC), whose consultant had met with the Project's lead traffic manager to study the proposed detour. ABC arranged a meeting for September 9 between the task force co-chairs and Michael Lewis, then head of design and engineering for the Project, to discuss methods to minimize the detour's impacts on the neighborhood.

On August 23, Secretary Coxe responded to the task force co-chairs' letters and denied their request for additional environmental review based on previous approval of the 1991 FSEIS/R, which stated that specific Maintenance of Traffic Plans would be developed during final design in conjunction with the Boston Transportation Department and impacted residents and busi-

nesses. She accepted the Project's case that no acceptable alternative to the proposed detour existed and that it would provide adequate mitigation for it.

On August 26, the Chinatown CA/T Task Force co-chairs wrote to Michael Lewis explaining that they were still "firmly opposed" to the detour, but "willing to meet in good faith" on September 9. The EOC director spoke with Lihbin Shaio two days after this meeting to discuss the upcoming EOC meeting agenda and clarify the role of the EOC. Michael Lewis would report on any progress in responding to the concerns of the task force. The EOC hoped that the Project would have a solution by then, but if not, it would be an opportunity for her to express the concerns publicly with multiple public agencies and community organizations present to hear them.

At the EOC meeting on September 17, Michael Lewis provided graphics of the proposed detour and other studied alternatives, explaining the rationale for moving ahead with it. Lihbin Shaio explained the community's view that this was a failure in public process since its input had not been considered prior to final design, its concerns about the detour's impacts, and its belief that the Project had not given serious consideration to alternatives. They were also fearful that the temporary detour could become permanent. The representative from the City of Boston's transportation department said the city's consultant was looking at a new alternative which he was hopeful would work. Members of the EOC and others present at the meeting confirmed their interest in finding an alternative. EOC chair Robert Tuchmann ended the discussion with the understanding that the city and the Project would continue to meet with the community to determine whether there was a feasible alternative.

The consultant's new alternative tested well and the Project was able to tell the task force cochairs that an alternative to the detour had been identified to move the traffic to an already planned temporary bridge rather than to Chinatown's streets. At a community meeting on October 22, 1996, the Project announced that the identified alternative "met the community's and the Project's objectives without impacting the Project's budget or schedule." The task force cochairs, who had been informed of the solution in advance, wrote to Michael Lewis on October 11 thanking him for developing the alternative and calling it "evidence that open communication and cooperation can result in creative new solutions that benefit all parties." The co-chairs privately expressed their appreciation to the EOC for giving their issue the credibility and visibility that provided the Project and the City of Boston with an incentive to put more effort into finding an acceptable solution.

3. Mitigation of construction noise impacts:

Commitment Summary: The Federal ROD required contractor limitations to noise impacts by use of appropriate, location-specific measures. The FSEIS/R described measures that would be considered and estimated the duration of moderate to substantial noise impacts at sensitive locations. A definitive noise mitigation program that conformed to the City of Boston's Noise Ordinance was to be developed during the Project's design phase.

Issues and Action: The impacts of noise gener-



Early construction in South Boston

ated by nighttime construction work became a divisive issue between the Project and its residential abutters as well as a source of disagreement over the commitments between the Project's environmental attorneys and the EOC director. The EOC became aware of the issue in 1995 when the few residents of Boston's Leather District, an area considered commercial in the FSEIS/R, complained that they could not sleep due to the noise from heavy construction. The Project had been trying to address their problems on a case by case basis, but it was made difficult by the lack of specific restrictions in then existing construction contracts. By 1996, noise had become a critical issue for the Project and other neighborhoods. It continued to be a source of complaints for the Project's duration, but they peaked in 1998 and fell steadily thereafter. Between 1996 and 1998, the Project developed a model noise mitigation program and the most comprehensive set of contract specifications in the country. FHWA conducted a Process Review of the CA/T Noise Control Program in June 1998 and issued a report that identified many best practices to share with others in the transportation community."28

The magnitude of the problem and its challenges

"The timely completion of the Big Dig requires that work continue about 20 hours per day...The commitment to finish on time, however, must be balanced with respect for the quality of life of nearby residents, especially their need for undisturbed sleep."

Boston Globe editorial, 11/12/96

"The City of Boston will only allow nighttime construction by the Project near residential neighborhoods to the extent that the Project's noise protection program works."

Boston Mayor Thomas Menino in a letter to Project Director Peter Zuk, 12/16/96

were not envisioned when the Project went through its regulatory approval process.²⁹ In early 1996, the EOC director pointed to language in the FSEIS/R stating that, to the extent possible, construction activities in sensitive areas would be limited to appropriate hours. The Project pointed to language stating that a second and sometimes a third shift would be required. The need to keep traffic moving during the day and a growing concern that the Project was taking too long to build led the Project to take steps (when seeking MEPA approval for certain project design changes) to allow 24/7 construction of a major interchange at its southern contract limits.³⁰ There were few residential buildings to be affected by this work and the Project committed to improving its noise mitigation program. Many interested parties, including the EOC, objected to the change in work hours, particularly given the language in the FSEIS/R and the Project's record to date on noise mitigation, but it became clear that the pace of work would increase projectwide. The MEPA decision recognized their concerns and disagreed with the Project's assertion that the earlier FSEIS/R had been ambiguous with regard to work hours, but approved the Project's proposal to allow construction to proceed in a timely manner while minimizing noise impacts to the community. The decision called for consistent enforcement, tighter contractor obligations, the ability to halt work if the noise could not be remedied, and contractor participation in the community meetings. The Project's consultation with city and state agencies, as well as abutters, "should seek to address in particular how the most noisy construction activities can be scheduled as much as possible to comply with earlier noise restriction commitments, and at a minimum with the ambient +5 limitation."³¹

The most proactive neighborhood organization was the North End/Waterfront Central Artery Committee (NEWCAC). Its members knew about the concerns of Leather District residents and in 1996 were beginning to experience similar problems with noise. (It was not the steady drone of construction with which urban residents could cope, but rather the sudden impacts and high pitched sounds from cranes and backup alarms that impeded sleep.) Using the community meeting process and commitment information provided by the EOC, NEWCAC asked to see the draft specifications for the first major construction contract along its borders. Its members gained support for their demands in the press. In several meetings with then Project Director Peter Zuk, they called for restrictions that would allow night work only in cases where it was deemed absolutely necessary and they asked for 2-8 hour shifts vs. the proposed 2-10 hour shifts. The Project presented its developing noise control plans with specific restrictions for night work. The working meetings culminated in a standing-room only neighborhood meeting called by NEWCAC with Project and city officials. The Project introduced its new noise expert, Erich

Thalheimer. The press reported angry residents complaining of midnight jackhammers and incessant back-up alarms and demanding no work from 11 pm to 7 am. Project and city officials responded that this would add 3 years to the already lengthy contract (the first of three in that area) and they distributed flyers outlining all the steps to be taken to decrease night noise. It was the beginning of a years-long process in which the Project continually refined and tightened its noise specifications, mitigation measures and enforcement; and in which community representatives met frequently with the Project and its contractors to work out solutions to problems each step of the way.

The EOC played a meaningful role in the development of the Project's noise control program:

- Its director provided residents and others with the language from the FSEIS/R, giving them the tools to work proactively with the Project and the City of Boston, and served as a point of contact for all those seeking information on the commitments or noise control programs. She took issues to the EOC's Project liaison when necessary to help resolve problems.
- The EOC held a public meeting on May 13, 1997 in which the Project presented a comprehensive "Construction Noise Control Program" to representatives of all impacted neighborhoods, public interest and business groups, and interested public agencies. Erich Thalheimer, the Project's noise control expert, said that the Project took seriously its preparation for the EOC meeting because it was a highly credible forum in which to share and discuss information. The EOC continued to put the topic of noise impacts and mitigation on its agendas each year and the Project continued to use community-wide input at these meetings to help refine its efforts.
- The EOC's annual reports covered the Project's progress with noise mitigation commitments. The 1996 and 1997 reports urged greater progress, but later reports recognized the progress being made and encouraged it to continue. The only ongoing criticism, which was shared by a representative of the Boston Transportation Department in the 1998 Process Review, was that the Project should have undertaken the development of a program before initiating major construction.

4. Preserving commitments to open space on the Central Artery Corridor:

Commitment Summary: The

FSEIS/R and MEPA Certificate required 75% of the surface parcels along the central corridor to be developed as open space in the form of parks, plazas, park buildings and sidewalks. The ROD required the established public process (described in the FSEIS/R) to continue through design and construction. The process had to be based on a cooperative, tripartite framework (City, State and Community).

Issues and Actions: The transformation of the Central Artery Corridor through downtown Boston from an aging, elevated highway structure to the "Rose Kennedy Green-



Graphic of Wharf District parks on the Greenway

way" was to be the legacy of the CA/T Project. Of all the Project's future benefits, the Greenway is viewed as its most dramatic improvement.

An early concept plan for the Greenway was included in the 1990/91 FSEIS/R and approved in the MEPA Certificate, and as early as 1993, the city and state set about implementing the participatory joint development planning process called for in the ROD. As part of this process, the City of Boston appointed a Central Artery Completion Task Force to represent "the community" and advise the city and state during design development. In the late 1990s, as the designs for surface restoration along the corridor took shape, there was a growing concern that a highway agency was not equipped to lead park design or to manage them in the future. (The parks are located above the new highway tunnel.)



The Greenway takes shape in 2005

In 2000, the State Legislature established a Legislative Study Commission, led by the House and Senate Chairs of its Transportation Committee. Its draft report in July 2001 recommended that a special governance entity be established to design, manage and operate the Greenway. In July 2002, then Governor Jane Swift filed legislation, with the support of Boston's Mayor Menino and House and Senate leadership, to create a Millennium Greenways Trust. Once approved, the Trust would take over the design of the Greenway and raise funds for its future management and maintenance.

The Completion Task Force and a majority of the business, environmental and community

organizations represented on it applauded the progress being made toward governance of the Greenway, but expressed serious concerns about the proposed structure for governance and finance, including the Trust's lack of accountability. The Greenway was to be a public park and the structure proposed amounted to a private trust.

The EOC remained neutral on the question of the entity itself and focused on the extent to which the proposed Trust would carry out the environmental commitments. Its public statements and testimony before the Legislature's Transportation Committee demonstrated that the legislation as written would not transfer the open space commitments to the Trust and that a privately controlled design process could not substitute for the federally mandated joint development process. It also expressed concern for slowing the design progress that was underway, noting that the Greenway was an integral component of the CA/T Project.

A coalition of leading environmental organizations that included the EOC worked quickly to draft and submit an amended version of the legislation to address both the structural and environmental concerns. Although a committee redraft of the legislation included many of the proposed amendments, the Committee on Transportation ultimately voted not to report the Millennium Trust legislation favorably out of committee.

The Project continued to complete the designs through the established public process and is currently constructing the Greenway parks. In 2004, Mayor Menino and the Massachusetts Turnpike Authority (for the CA/T Project) reached agreement to create a public Greenway Conservancy with responsibility for financing, managing and maintaining the parks when completed. Its board members have been appointed by the governor, mayor and Turnpike chairman and its

plans and fundraising are well underway. The Completion Task Force continues to be involved in final design and construction decisions and a few of its members are participating in the Conservancy as members of advisory committees to its board of directors.

Summary:

While the oversight of the implementation of environmental commitments was not an orderly, step by step process, the above examples illustrate the consistencies in the EOC's approach to each issue:

- Limit the committee's activities just to the commitments in order to maintain its credibility
- Listen for concerns or unresolved issues
- Compare proposed plans to the written commitments and identify consistencies and inconsistencies
- Share this information with appropriate stakeholders and the CA/T Project, and suggest possible means of resolution
- Bring all parties to the table if commitment issues continue to be unresolved
- Allow the dialogue before, during and after the meeting/s to inform both the Project and stakeholders
- Continue to track the relevant commitments and issues and continue to seek opportunities to air and address them until they are resolved.

V. Positive Influences that the Committee has had on the Project's Outcome

The environmental commitments documented in the Project's FSEIS/R and elsewhere became an integral part of the Project. The Project improved traffic flow and air quality, maintained the economic viability of the City of Boston and removed a visual blight on its landscape. It reconnected the city's neighborhoods and its downtown to the harbor, and will create approximately 300 acres of new open space, much of it in places where highway structures once stood. In the case of Spectacle Island in Boston Harbor, the Project used excavated material to cap a former city landfill and then created a park on top. All of these benefits took over 14 years to achieve. Countless individuals have helped bring the Project to fruition and the EOC was just one part of these efforts.

• The EOC has helped the Project and its stakeholders **know about and define the environmental commitments** that were made to gain its approval. During the Project's development of its commitment tracking system and commitment status reports, the EOC

helped to interpret the commitments, and later, asked questions about progress that encouraged their implementation. While the Project would have kept many of its commitments without an environmental oversight committee, the EOC enhanced its efforts and the degree to which the commitments were kept. One example is the Project's commitment to develop a new 18 acre park in East Boston on privately owned property that was used for airport parking. The planned taking of part of this property by the Project for highway construction provided an opportunity to mitigate the



Groundbreaking for the East Boston buffer park

impact of the highway on the adjacent residential neighborhood by acquiring the land, moving the parking facility from the neighborhood to airport property, and turning the remaining land into a buffer park. A land swap agreement was reached, but its complexity was keeping it on the Project's backburner. In 1996, the EOC took the lead in influencing the Project to address these difficult issues and held a public meeting for East Boston residents at which the Project committed to begin the park design process. Michael Lewis, who later became Project Director, led the community process to design the park and it is under construction today.

- The EOC has helped by **tracking key environmental commitments** and, in so doing, brought them the attention and credibility they needed given the Project's primary focus on highway construction. The EOC helped to keep the commitments alive. For example, the commitment to cover the open ramps downtown (to and from the new highway tunnels) was important to restoring the surface and reconnecting the city. The EOC became the primary resource on the documentation of these commitments and provided information on request to public officials and private citizens. Today, there are three developments in progress that were planned to cover the three open ramp parcels on the downtown surface corridor.
- The EOC has facilitated modifications to the commitments over time when necessarv and appropriate. Committee members did not expect that the commitments would be static and recognized that circumstances could change. In frequently making a case for more public involvement in decision-making, it was saying that an informed and respected constituency, if fairly treated, would be more open to change if it was needed. This was proven in the case of issues surrounding work hours and noise, not only in the gradual acceptance of the 24/7 con-



Open ramps are to be covered

struction schedule when the noise mitigation program worked, but in multiple cases where the Project met with residents to discuss a schedule for noisy work in advance. When residents were kept informed of such work, knew that it was necessary and what measures would mitigate it, they were better able to cope with it. The formal means of change to the FSEIR was the filing of a Notice of Project Change with the MEPA Office. Over time, the Project worked to build an understanding and support for needed changes in advance of filing them with MEPA. One such example was a proposal in 1996 to substitute longitudinal for transverse ventilation in some of the Project's short ramps and tunnels. The EOC worked with the Project to hold public forums well in advance of the NPC filing and helped to define the changes in commitments to those impacted. In later years, the Project took changes to MEPA only when it had gained public support for them.

• The EOC has helped to influence the outcome when the Project was not keeping its commitments. For example, in response to the concerns of Boston's Charlestown neighborhood about a commitment that was not moving forward in 1997, the EOC facilitated communications among the Project, the Boston Transportation Department and FHWA to resolve issues surrounding the initiation of a transportation corridor study re-

quired under the FSEIS/R for the Charles River Crossing. The study was completed and funding for the improvements is in progress. Often the solution to such problems lay in bringing attention to them when they were important to a constituency but had been lost in the process. In addition, the EOC's annual reports, which showed broad compliance with and progress toward implementation of the commitments, would have been supportive documentation should any party have sought to stop the work because of failure to comply with one or a few commitments.

- The EOC has helped to **maintain support for the Project**. Failures to meet significant commitments could threaten to delay or derail the Project, if not by those who were directly impacted or their elected officials, then by the media. By helping those impacted in their efforts to work with the Project toward commitment implementation, the EOC was a partner working in the Project's interest. There were numerous occasions when the EOC's forums gave the Project a platform to explain delays or unresolved issues. This dialogue helped build mutual understanding and sometimes acceptance that the problems would be resolved. It also served to clarify the commitments so that the public would not expect more than had been promised.
- The EOC has helped to provide information in addition to the Project's broader public information and outreach programs. It was another point of contact and often reachable when individuals could not speak directly with the Project. The EOC's public forums, newsletters and annual reports helped to inform those most interested in the Project's commitments. Finally, it provided continuity as state administrations and agency staff changed. Each year, the committee would meet with the cabinet secretaries for transportation and environmental affairs (with the Project present) to provide independent updates on the commitments and progress toward meeting them. In addition, other state and federal agencies used the resources of the EOC to supplement information being gathered on Project environmental issues.

VI. Expected Future Benefits resulting from the Committee's Actions

The environmental commitments were tracked under four broad categories of air quality, traffic management, public transit and open space. In each of these categories, there were construction-period mitigation commitments and commitments to provide long-term benefits. Some of the long-term benefits are still to be realized. For example, there were construction mitigation measures to address dust, noise, odors and toxic pollutants and there are long-term commitments to maintain air quality in and around the highway tunnels. Similarly with the public transit commitments, there was a Construction-Period Transit Mitigation Program and there are commitments to improve public transit to maintain urban air quality and mobility. The traffic management commitments have largely been met or will be in the near future. Finally, the open



New Harborwalk and Vent Building in South Boston

space commitments are long-term benefits and will continue to be completed as part of the Project's final surface restoration. They are an ongoing priority for the members of the EOC.

Future benefits of the Committee's work are anticipated in the following two areas:

Air Quality: The Project received its Preconstruction Certification for its tunnel ventilation systems in 1991. It is required to submit a final Operating Certification to the Massachusetts Department of Environmental Protection (DEP) by June 2006. The operating certification process consists of: (a) a compliance monitoring program, (b) record keeping and reporting, and (c) a contingency mitigation plan. The EOC developed an understanding of these long-term air quality commitments through participation in the meetings of the interagency Construction Air Quality Committee. In addition to its written reports, the EOC organized two public meetings in 2002 and 2004 to help others understand the operating certification process and prepare for a future public comment period. The EOC is concerned that maintenance of the tunnel ventilation systems continues to be a priority in the years ahead.

Open Space: The Project is developing approximately 300 acres of new open space, including public parks, additions to Boston's Harborwalk, and landscaped areas adjacent to the highway. Most of the new parks will be along the Charles River, the Central Artery Corridor Greenway, in East Boston and on Spectacle Island. While some of the parks have been completed, most are considered to be future benefits. The EOC has helped to ensure that each park has its own participatory process as described in the FSEIS/R and has taken actions to further the realization of these commitments:



Paul Revere Park on the Charles River

- From 1995-97, the EOC worked with the Office of the Secretary for Environmental Affairs and the CA/T Project to create a new management structure for design and construction of the new Charles River parks and to strengthen the Citizens Advisory Committee to guide park completion.
- In 1999, the EOC held a forum for the Project to jump-start a final design process for the Greenway parcels, and since then has been a constant voice for the park commitments at the state level and at the community level as a member of the Completion Task Force for the Greenway. In 2002, the EOC identified language in the ROD that called for a "Joint Development Planning Process" for final designs of all surface parcels. The Project incorporated a description of this process in its Joint Development Protocol submitted to and approved by FHWA.
- The EOC helped bring the East Boston park commitments to the Project's attention in the mid-1990s and has consistently monitored and aired issues of concern at EOC and community meetings since that time.
- The EOC guided resolution of a budget disagreement between CA/T and the Spectacle Island Park Advisory Committee in 1999, and assisted the advisory group with its meetings and communications through 2004.

Finally, the EOC expects that its actions will continue to benefit the future oversight of public works projects based on some examples to date:

• The Executive Office of Environmental Affairs used the EOC as a model in 2002 when it required through MEPA the crea-



Spectacle Island Park ready for visitors in 2006

tion of an environmental oversight committee for the Emerald Necklace Park System Restoration Project.

- The EOC contributed to a 1998 comprehensive revision of the MEPA Regulations on the basis that the CA/T Project had served as a testing ground for the filing and review of project changes given its unusual size and duration. The revised section on Project Changes tightened the requirement for public notice of such filings and required that they be clear with regard to changes in prior commitments.
- The EOC assisted a citizens working committee that had been appointed by Boston's regional transit authority to monitor the design and reconstruction of three public transit stations. In 2004, the committee sought the EOC's advice on monitoring project implementation.
- In 2003, a consultant preparing an EIR for a major highway project in the State of Washington contacted the EOC for information on construction mitigation. The EOC provided him with additional contact information and continues to be a resource for others conducting research on the CA/T Project.

VII. Applicability of this type of Committee to other Public Works type Projects

As noted above, the EOC has served as a model for its state environmental offices and as an information resource for those seeking to understand or assess the CA/T Project's mitigation efforts from in or out of state. The committee's uniqueness lies in its:

- Independence from the public agencies that established it
- Its singular purpose
- Its role as a resource and honest broker for project commitment issues
- Its objectivity and longevity.

The CA/T Project was unique in its scope, duration, level of complexity and location in a dense urban environment with a history of highway project takings and impacts. Homes and businesses were located within a block, and sometimes within feet of the heavy construction. Therefore, mitigation became imperative rather than just desirable. Agreements to provide significant long-term benefits were essential to gaining and maintaining support for the Project.

The Artery Business Committee served major businesses and worked with the City of Boston and the Project to keep traffic moving and the city open for business. The EOC was a smaller umbrella organization for environmental groups and the impacted neighborhoods. It served this purpose well, but in applying the concept to other public works type projects, the following changes to the model might be considered:

- Secure a source of funding that is independent of the public works project's funding (as with the EOC) and secure it for the duration of the project. Consider making its funding a condition of regulatory approval. (The EOC had to seek funds from the two executive offices on a yearly basis.)
- Provide adequate funding for a minimum of two staff persons, including one to perform the technical research and one to provide communications and outreach. Additional administrative support would be helpful. (The EOC's staffing was limited by its funding.)

A committee comparable to the EOC would be applicable to other public works type projects that:

- Are large enough to have a substantial list of short and long-term mitigation requirements
- Had some difficulty in gaining public support
- Plan to have a participatory public process for which the project proponent's consultant may not be able to resolve all issues
- Have a need to track and keep commitments in order to maintain support
- Are willing to work with an independent oversight group to help clarify and resolve issues that might otherwise impede progress or increase costs.

In order for this type of committee to be effective, there needs to be a legal mechanism for making the project proponent responsible for all the mitigation commitments in its environmental documents. While this was the case for the air quality, traffic management and open space commitments monitored by the EOC, its oversight of the public transit commitments was less effective because they had been assigned to a non-Project participant, the Massachusetts Bay Transportation Authority, which has its own statute, board of directors and budget. Public



regulatory agencies have a responsibility to ensure that in approving mitigation measures for project impacts, the measures can in fact be implemented by the project proponent.

Conclusion:

Interested citizens have an opportunity to provide input into the environmental impact review process. State and federal agencies use the information in reports submitted to them to set conditions of their approval. However, there have been relatively few successful models of bureaucratic mechanisms to track the project proponent's implementation of the required mitigation measures, particularly if a project is lengthy, complex and broad in its scope. While public agencies exist to enforce the requirements in an EIR and other permits, they seldom have sufficient staff to track each project's compliance. Public agencies are also responsible to elected officials and may not have the time, independence or institutional memories to serve as a resource or broker disputes. For a small or short-term public works type project, tracking commitment compliance may be straightforward and easily accomplished. In the case of the Central Artery/Tunnel Project and other significant public works projects, a committee given the EOC's responsibilities can serve a useful purpose for all who have a stake in its successful outcome.

Reference:

Anne Fanton Central Artery Environmental Oversight Committee Boston, MA 617-720-2290 afanton@earthlink.net

FPA	Schattanek G				
DEP	B/PB*	N/A**	Contract	00001107	Air Ouality*
				[EIR'90 1:20, Constr.: pgs. 54, 74, 81, 82] [Section 61: '91 CA/T: pgs. 52,67] [EIS/R'90 SBHR, Ch.25; p. 25] [ROD: FHWA CA/T-5/91: p.22, 23 (#s14, 26)] [EIR'90 IIB: 4, Matri: p. 44] [EIR'90 IV:3,Response: p. 28] [EIR'90 IV:4,Hearings: p. 5] [EIR'90 IV:4,Hearings: pgs. 14,21,88] [EIR'90 Apx:Const.Mit: pgs.21,24]	
BTD DEP MEP/	SDC* B/PB Schattanek,G.	N/A**	Contract Haul/Bypass Rd Project-wide Spectacle Island	00001106 Dust Control: Contractor shall take appropriate measures such as: wheel washing: street sweeping/washing/wetting; wetting construction areas; monitoring loading operations; using dedicated paved roads; using scaffolding for excavation; covering trucks and operating low speeds on unpaved roads; maintaining clean work site; keeping adjacent streets free of mud and dust by regular cleaning of streets & trucks.	Air Quality* Dust Monitoring Odor Constr. Mgmt. Site Conditions Public Outreach Info/narticinate
				[EIR'90 IV:3.Response: p. 28] [Section 61: '91 CA/T: pgs. 67,68] [EIR'90 I:20, Constr.: p. 54] [EIR'90 IV:4.Hearings: p. 5] [EIR'90 IV:5.2, Lttrs: p. 61] [EIR'90 Apx:Const.Mit: pgs. 15,37]	
DEP	SDC*	N/A**	Contract Haul/Bypass Rd Project-wide	00001104 Demolition Dust: The contractor shall take all possible measures to control dust during demolition. Contractor shall comply to federal and state standards; will water site and use tarpaulins; will not do any uncontrolled sandblasting.	Air Quality* Dust
BOST EOEA MEPA MPA	MHD* Killian,R. B/PB Schattanek,G.	N/A**	Contract East Boston	00000662 Concrete Batch Plant (East Boston): Use best available technology to control dust such as bag filters, watering and covered conveyers. Develop an approved air quality (monitoring) plan [ROD][EIR]. [EIR'90 1:20, Constr.: p. 52] [ROD: FHWA CA/T- 5/91: p. 23] [EIR'90 VI:5.2, Lttrs: p. 61] [EIR'90 Apx:Const.Mit: p. 15]	Air Quality* Dust Constr. Mgmt. Other
FAA MPA	SDC*	N/A**	Contract East Boston	0000044C Design barge unloading facility, adjacent to Bird Island Flats, to mitigate dirt/dust blown toward runways and taxiways. (construction period) [MOA: Massport Sale: Exhibit III, Logan, p. 10]	Air Quality* Dust Material Disposal
Agey	Resp Party/ Contact(s)	Status	Category/ Location	Paraphrased Text *** (See referenced source documents for full text)	Keyword
10:42:31	ē			CA/T Paraphrased*** Commitment Listing - Rev. 2	December 24, 1997

Appendix A: Sample page from the Central Artery Project Commitments December 1997-Final Revision 2

Appendix B:
Sample page from the CA/T Project's 2004 Report for the EOC
on (selected) Air Quality Commitments

November 12, 2004	CA/T PR(CA/T PROJECT'S YEAR 2004 FIRST REPORT FOR EOC AIR QUALITY and TRAFFIC MANAGEMENT	REPORT FOR EOC		16	13:27:55
Keyword	Paraphrased Text *** (See ref source docs for full text)	Source Documents	us	Due Date	Resp Party/ Contact(s)	No.
Air Quality* Dust	00001104 Demolition Dust: The contractor shall take all possible measures to control dust during demolition. Contractor shall comply to federal and state standards; will water site and use tarpaulins; will not do any uncontrolled sandblasting.	[EIR'90 IV:3,Response:p. 28] [Section 61: '91 CA/T: pgs. 67,68] [EIR'90 II:20. Constr.: p. 54] [EIR'90 IV:5.2. Lttrs: p. 61] [EIR'90 Apx:Const.Mit: pgs. 15,37]	Ongoing: In accordance with CA/T Project specifications Division I, 7.01B Air Pollution Controls and Division II, 721.561 Construction Dust Control. contractors are required to apply wet suppression (water or a wetting agent) as necessary. Egressing dump trucks are required to be covered with tarpaulins. Tarps and covers are used when sandblasting occurs. See item #00000653 (EOC item A.04A) regarding monitoring results. Monitoring results include locations near demolition measures have been developed and are being implemented for the abatement of lead and asbestos prior to the demolition of sections of the Central Artery. Air quality monitoring is being conducted during these abatement operations.		MTA* Kasprak,A. SDC	A-05 C
Air Quality* Dust Constr. Mgmt. Other	00000662 Concrete Batch Plant (East Boston): Use best available technology to control dust such as bag filters, watering and covered conveyers. Develop an approved air quality (monitoring) plan [ROD][EIR].	[EIR'90 I:20, Constr.:p. 52] [ROD: FHWA CA/T-5/91: p. 23] [EIR'90 IV:5.2, Lttrs: p. 61] [EIR'90 Apx:Const.Mit: p. 15]	Complete: A temporary concrete batch plant was constructed in East Boston in the vicinity of the CA/T Project contract C07D2 in Sept. 1996. Batch plant operations were discontinued in 2002 and the plant was disassembled and removed from the site. During batch plant operations, best available control technology to control dust was used.		MTA* Kasprak,A.	A-06
Air Quality* Toxicity Odor Material Disposal Hazard Regs/Laws	0000666A Odor & Toxic Testing: Test soil to control excavation/ dredging odor and toxic pollutants, including abatement program.[application of chemical compounds and construction staging to control temporary odor producing sources('91 ROD)]	[EIR'90 Apx:Const.Mit:p. 24] [ROD: FHWA CA/T- 5/91: p. 22 (#12)] [EIR'90 I:20, Constr.: pgs. 54,82]	Ongoing: Standard specifications for both Construction Odor Control (721.562) and for Sedimentation and Erosion Control (140.141) continue to be included in all CA/T Project contracts. Dredging in the Fort Point Channel, considered to be the major potential source of odors, has been largely completed without incident. The application of lime and/or blanketing	n/a	MTA* Kasprak,A. B/PB Barnett,C.	A-07
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Photo Credits:

Introduction: Courtesy of the Massachusetts Turnpike Authority (MTA) / Central Artery Tunnel (CA/T) Project (Map); Photo courtesy of Boston's Central Transportation Planning Staff (CTPS)

Section I: Courtesy of the Metropolitan Area Planning Council

Section IV: Courtesy of the MTA – CA/T Project

Section V: Courtesy of the MTA – CA/T Project (Photo 2)

Section VI: Courtesy of the MTA – CA/T Project (Photos 1-3) and CTPS (Photo 4)

Endnotes:

⁵ Ann Donner, former Executive Director of Move Massachusetts 2000.

⁶ Robert O'Brien, former Move Massachusetts 2000 board member and a founding member of the EOC.
 ⁷ William Constable, former vice president of 1000 Friends of Massachusetts, former environmental coun-

sel for the Massachusetts Executive Office of Transportation, and a founding member of the EOC.

⁸ Robert W. Weinberg, former chairman of the Massachusetts Port Authority Board of Directors and former president of Marketplace Development Boston .

⁹ Ibid.

¹⁰ David Soule, former executive director of Boston's Metropolitan Area Planning Council and a founding member of the EOC.

¹² Robert Ruzzo, former senior environmental counsel for the Massachusetts Highway Department (MHD)/CA/T Project, former general counsel and deputy secretary for environmental policy for the Executive Office of Transportation, and former chief of real estate development and environmental policy for the Massachusetts Turnpike Authority (MTA). The Massachusetts Legislature transferred the responsibility for the CA/T Project from the MHD to the MTA in 1997.

¹⁴ Robert Tuchmann, Chair of the Central Artery Environmental Oversight Committee.

¹⁵ David Soule, former executive director of Boston's Metropolitan Area Planning Council and former member of the EOC.

¹⁶ Eugenia Beal, president of the Boston Natural Areas Fund.

¹⁷ Rebecca Dwyer, resident of Fort Point Channel neighborhood in South Boston. N.B. The Massachusetts Legislature transferred the responsibility for the CA/T Project from the MHD to the MTA in 1997. (See endnote 12 above.)
 ¹⁸ Edward McCormack, senior environmental counsel and liaison to the EOC for the Massachusetts Turn-

¹⁸ Edward McCormack, senior environmental counsel and liaison to the EOC for the Massachusetts Turnpike Authority/CA/T Project.

^{¹9} Ibid.

 ²⁰ Federal Highway Administration Record of Decision, CA/T Project, Supplemental Environmental Impact Statement, May 10, 1991, page 25.
 ²¹ Central Artery Project Commitments, December 1997, Find Project, Supplemental Environmental Impact

²¹ Central Artery Project Commitments, December 1997 – Final Revision 2, prepared by the Massachusetts Highway Department for FHWA.
²² Barry Friswold, former mitigation menoses and the final result in the final result.

²² Barry Friswold, former mitigation manager and liaison to the EOC for the Massachusetts Highway Department/CA/T Project.

²³ Attachment to November 17, 1995 letter to Peter Zuk from Donald Hammer, Process Review-of Environmental Commitment Tracking as Applied to the CA/T Project, page 3.

¹ Central Artery/Tunnel Project Summary, Public Information Packet, May 1994.

² Mega-Project, A Political History of Boston's Multimillion Dollar Artery/Tunnel Project, David Luberoff and Alan Altshuler, Taubman Center for State and Local Government, John F. Kennedy School of Government, Harvard University, April 1996, Chapter 1.

³ Robert Weinberg, former chairman of the Massachusetts Port Authority Board of Directors and former president of Marketplace Development Boston.

⁴ Mega-Project, A Political History of Boston's Multimillion Dollar Artery/Tunnel Project, Chapter IV, pp 6-7.

¹¹ Barry Friswold, former mitigation planner and liaison to the EOC for the Massachusetts Highway Department/CA/T Project.

²⁴ Commitment Status Report Draft, July 29, 1992.

²⁵ The CTS also included administrative, safety, historic, utility and other non-environmental commitments.

²⁶ CA/T Project's Year 2004 First Report for EOC, Air Quality and Traffic Management, p. 4.

²⁷ Robert O'Brien, former Move Massachusetts 2000 board member and founding member of the EOC.

²⁸ Letter from FHWA Mass. Division Administrator Peter Markle to Project Director Patrick Moynihan on August 30, 1999. ²⁹ Erich Thalheimer, former CA/T Project Noise Engineer.

³⁰ South Bay/South Boston Areas Notice of Project Change/Environmental Reevaluation, March 15, 1996.

³¹ Certificate of the Secretary of Environmental Affairs on the Notice of Project Change, April 30, 1996, p.

5. (Holding nighttime residential noise increases to no more than 5 decibels above ambient levels was expected to prevent construction-related noise from becoming dominant.)