

A. INTRODUCTION

This chapter focuses on two concepts: the permanent commitment of resources as compared to the benefits of the project and the relation between expending environmental resources in the short-term and gaining productivity in the long-term. Both of these concepts are discussed in regards to the No Action, the TSM, and the Preferred Alternatives.

B. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Resources that may be irreversibly and irretrievably committed to the East Side Access Project include construction materials, energy, labor, funds, and land. Construction materials, energy supplies, and labor used to construct any of the alternatives are generally not retrievable. They are not in short supply, however, and their use would not have an adverse impact on their continued availability for other projects. Also, labor expenditures are consistent with governmental incentives to spur growth.

The No Action Alternative, by definition, would not irreversibly or irretrievably commit resources. While the No Action Alternative would require a greater commitment of resources in the future due to its failure to improve the accessibility and efficiency of the transportation system (see energy consumption comparison, below), it would not, in and of itself, require a commitment of those resources.

The total commitment of funds required for construction of the TSM Alternative is estimated at \$656 million. The TSM Alternative would require 61 million British Thermal Units (BTUs) to construct, as described in Chapter 17, "Construction and Construction Impacts," and would result in a reduction in energy consumption as compared to the No Action Alternative, due to a reduction in annual vehicle miles traveled. This reduction in energy would amount to an annual savings of approximately 177 billion BTUs. The TSM Alternative would require a relatively small commitment of land.

The total commitment of funds required for construction of either option of the Preferred Alternative, including easements, is estimated at \$4.71 billion. The total commitment of energy required for construction would be 1.6 trillion BTUs, as described in Chapter 17. However, operation of the Preferred Alternative would reduce annual energy consumption by approximately 150 billion BTUs as compared to the No Action Alternative. This reduction would be due to a reduction in annual vehicle miles traveled as a result of the Preferred Alternative. The Preferred Alternative would require a commitment of land greater than the TSM, much of it is currently rail or railyard right-of-way. Easements beneath or through private property would be acquired under the Preferred Alternative.

These resources would be committed to benefit residents of the immediate area, state, and region by an improved transportation system. Benefits of the Preferred Alternative would include

improved accessibility and savings in travel time (reducing commuting times by up to one hour each day), reductions in crowding and delays, reductions in travel by automobile and taxi (of up to 375,000 vehicle miles traveled each day) and related reductions in the emission of pollutants (of up to 564 tons of carbon monoxide [CO], 166 tons of volatile organic chemicals [VOCs], 117 tons of nitrogen oxides [NO_x], and 62 tons of inhalable particulate matter [PM₁₀]) and greater availability of quality services, which would together outweigh the commitment of these resources. There are no other known resources that would be committed as a result of the construction of any of the alternatives.

C. RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Short-term effects on the environment result from construction impacts. Long-term effects relate to the maintenance and enhancement of long-term productivity—in particular, the consistency of the project with long-term regional and local planning objectives. The short- and long-term effects of each alternative are summarized below.

SHORT-TERM USES

The No Action Alternative would not require major construction and thus would not result in any short-term impacts, either adverse or beneficial.

The TSM Alternative would have minor short-term effects related to its construction. These would primarily be inconveniences associated with traffic delays and noise while the roadway reconstruction portion of the TSM Alternative is underway. At the same time, this alternative would create jobs as well as related economic benefits during construction.

The Preferred Alternative would have more substantial impacts during construction (see the discussion in Chapter 17, “Construction and Construction Impacts”) than the other two alternatives. As discussed in Chapter 17, the impacts of the Preferred Alternative would be predominantly associated with the noise and vibration, dust, traffic and pedestrian congestion, and their related effects on neighborhood character as a result of new construction, particularly near cut-and-cover portions of the work or near the access shaft site in Queens. The short-term construction impacts of Option 2 would be much less than those of Option 1 in Manhattan. Construction of both options would have some potential to result in adverse impacts on nearby ground-floor retail uses. As a mitigating component of short-term uses of the environment, the Preferred Alternative would create significant economic benefits during construction, in the form of jobs and the direct and indirect demand for goods and services.

LONG-TERM PRODUCTIVITY

As described in Chapter 1, “Purpose and Need for the Project,” planning for transportation improvements in the Long Island Transportation Corridor began in the 1960’s, with plans for the construction of the 63rd Street Tunnel. The East Side Access Project is one of several being undertaken as part of the MTA’s Long Range Planning Framework, developed to identify and implement a unified program of improvements that would connect jobs to commuter rail, alleviate overcrowding, reduce travel time, better connect the rail and subway lines, provide high-quality transportation service, and extend service to underserved areas. A key goal of the framework is to expend short-term resources to invest in the transportation system now, so it

will be prepared to handle the region's transportation demands for the long-term. In this way, the MTA projects aim to forestall future declines in productivity that would otherwise result from a lack of investment in the regional transportation system.

The East Side Access Project has been conducted in coordination with the other studies included in the Long Range Planning Framework, as well as other local and regional plans, including the Long Range Plan and Transportation Improvement Program for the New York Metropolitan Region, sponsored by the New York Metropolitan Transportation Council; the New York State Air Quality Implementation Program; and other transportation plans and studies now under way.

Long-term benefits to productivity, and related long-term increases in productivity, addressed by the project's Preferred Alternative would include the following:

- Improved regional and local accessibility.
- Reduced travel time.
- Reduced congestion and overcrowding on the LIRR and at Penn Station.
- Improved reliability of commuter rail.
- Accommodation for projected future ridership.
- Support for the region's economic development.
- Reduced automobile traffic in the region.
- Significant reductions in mobile source air pollutants.
- An overall reduction in subway crowding.

SHORT-TERM USES VERSUS LONG-TERM PRODUCTIVITY

Local short-term impacts in use of resources resulting from the Preferred Alternative would be consistent with the maintenance and enhancement of long-term productivity for the local area, state, and region. Some resources that would be valuable in the long term are being spent to achieve higher productivity per unit resource in the long term. By investing these resources in future productivity, and over the long term, fewer resources would be needed to achieve the same level of unit productivity. This savings in per-unit productivity in the long term would be manifest in terms of energy consumption, land use, and financial cost. ❖