



THE CITY OF NEW YORK  
INDEPENDENT BUDGET OFFICE  
110 WILLIAM STREET, 14<sup>TH</sup> FLOOR  
NEW YORK, NEW YORK 10038  
(212) 442-0632 • FAX (212) 442-0350  
<http://www.ibo.nyc.ny.us>

January 21, 2003

The Honorable Margarita Lopez  
New York City Council  
250 Broadway  
New York, NY 10007

Dear Council Member Lopez:

Last fall your office requested that the Independent Budget Office (IBO) review Intro. 261, the Accessible Passenger Ferry Services Transportation Act. A formal fiscal impact analysis would require a compliance review of existing facilities and engineering expertise which are beyond the capacity of IBO. However, in order to assist the members of your Committee and the full Council in their consideration of this legislation IBO has prepared an analysis of the bill and compiled estimates of the costs of bringing individual facilities, vehicles, and vessels into compliance. The actual cost will depend on how many will require upgrade/replacement to comply with the new standards. The review is presented in the attached memorandum prepared by James Doyle, IBO's health care analyst.

If you have any further questions regarding this matter, please do not hesitate to speak with me at 212-442-8642 or via email at [georges@ibo.nyc.ny.us](mailto:georges@ibo.nyc.ny.us).

Sincerely,

George V. Sweeting  
Deputy Director



THE CITY OF NEW YORK  
INDEPENDENT BUDGET OFFICE  
110 WILLIAM STREET, 14<sup>TH</sup> FLOOR  
NEW YORK, NEW YORK 10038  
(212) 442-0632 • FAX (212) 442-0350  
<http://www.ibo.nyc.ny.us>

## MEMORANDUM

**FROM:** James Doyle  
**TO:** George V. Sweeting  
**SUBJECT:** Review of Intro 261  
**DATE:** January 16, 2003

---

The Accessible Passenger Ferry Services Transportation Act, Intro 261, amends the administrative code of the City of New York, in relation to standards and specifications for accessible facilities and passenger ferry water borne transportation services for disabled individuals in New York City.

### **Background**

The New York City Department of Transportation is responsible for the operation of city-owned piers and the licensing of franchises to private operators. Shore facilities and adjacent land are under various jurisdictions, including the city's Departments of Transportation and Parks and Recreation, the Hudson River Park Trust, and the Port Authority of New York and New Jersey.

Private ferry operators provide waterborne transportation services on routes between New Jersey and the East River and Hudson River piers in Manhattan, as well as connecting Queens, Brooklyn, and the Bronx with Manhattan. The importance of waterborne transportation has increased as a result of the destruction of the PATH train station at the World Trade Center. Ferry services also provide connections from Long Island and Connecticut, although on a more limited scale than the trans-Hudson and intra-city routes. Plans have also been developed for expansion of ferry commuter volume based in part on anticipated large-scale waterborne transport of participants and spectators during the 2012 Olympics, if New York is selected as the host city.

New York City's capital commitment plan for fiscal year 2003 includes funds for upgrading city-owned ferry facilities used by private operators: \$2 million in city funds and \$36 million in non-city funds. Projects include 34<sup>th</sup> Street ferry landing; Pier 11; downtown inter-modal (Pier 5); and Pier 79 (midtown ferry terminal).

The Pier 79 project is budgeted at \$21 millions in federal funds, creating a new ferry hub at 39<sup>th</sup> Street to be operated by NY Waterways. A number of pier projects are managed by New York City's Economic Development Corporation (EDC), which is currently embarking on a multi-year effort to upgrade the city's piers, including renovation, rebuilding old piers, and construction of a new pier at West 39<sup>th</sup> Street and the Hudson River. The timetable for EDC's plan is important in determining the cost to the city of complying with the mandates of Intro 261.

While there are plans for upgrading, rebuilding, and new construction of piers and terminals, the accessibility guidelines for the projects have not yet been made public. Under current federal law new and renovated *onshore* terminal buildings must follow Americans with Disability Act accessibility guidelines (ADAAG). Requirements for piers, docks, and vessels are less clear. Although the Americans with Disabilities Act (ADA) was signed into law in 1990, its ultimate impact on the passenger vessel industry is still unclear as no regulations have been developed for this mode of transportation. With no federal guidelines in place, Intro. 261 would lay out specifications for access by the disabled and imposes time limits for compliance for ferry service in the city.

### **Passenger Ferries and the ADA**

The passenger vessel industry is in the unusual position of being required to comply with both the public sector Title II (program access and public transportation) and private sector Title III (public accommodation and public transport) of the ADA, along with Coast Guard regulations. The operators of passenger vessels are subject to the general provisions of the ADA in terms of the broad anti-discrimination language and requirements to make "readily achievable" and "reasonable accommodations," within limits proscribed by health and safety risks and "undue burden." Operators of ground-based transportation, including the free bus services provided by ferry operators, must meet ADAAG. Federal law applies to terminals and other associated shoreline facilities, which are subject to ADA regulations for transportation terminals. In 2000, the Passenger Vessel Advisory Committee made recommendations<sup>1</sup> to the United States Access Board, which is responsible for proposing accessibility guidelines. Although final guidelines have not yet been issued, many of the advisory committee's proposals are incorporated in Intro. 261.

### **Cost of Intro. 261**

Intro. 261 would impose costs on both the city and the private firms operating ferry services. Accessibility for pier sidewalk ramps, doorways, waiting areas, restrooms, additional signage, TDD/TTY devices at terminals are already covered by the ADA, but are not in place in the vast majority of shoreline facilities in the city. Private passenger vessels are owned by a number of operators, the largest being NY Waterways, and they would be responsible for compliance measures for their vessels. The city's Staten Island Ferry operation and related facilities are

---

<sup>1</sup> U.S. Architectural and Transportation Barriers Compliance Board. *Final Report: Recommendations for Accessibility Guidelines for Passenger Vessels*. Passenger Vessel Access Advisory Committee, 2000.

currently accessible to the disabled and would not require additional spending in response to Intro. 261.

In most cases we do not have sufficient information to fully estimate the cost of complying with Intro. 261. In particular we do not have a full inventory of the number of piers and vessels that would require upgrading to come into compliance. Obtaining this information would require an engineering and compliance survey of existing facilities which is beyond the capacity and expertise of IBO. Rather than considering the aggregate costs, the following paragraphs describe the unit costs associated with particular types of upgrades or replacements that will prove necessary in at least some cases. For this discussion we have relied heavily on a report commissioned by the U.S. Department of Transportation that estimated the costs for implementing ADA for passenger vessels and shore facilities.<sup>2</sup> The unit costs cited reflect the access premium, the increased cost of providing access relative to current practice.

**Ground transportation.** The ADA already requires that newly purchased buses, other land transportation, and fixed-route buses comply with its regulations. The regulations appear to apply to the free fixed-route bus services provided by ferry operators. In 1993, the former Congressional Office of Technology Assessment estimated that the cost of outfitting a newly constructed bus with accessible technology and operating it over the vehicle's lifetime (20 years) at between \$25,000 and \$56,000. The capital cost estimate for a vehicle-based level-change device or lift is \$9,800. (All estimates are in 2003 dollars.) The current costs for retrofitting and the access cost premium for new construction likely have been reduced by new technologies.

**Docks and piers.** Shore facilities are predominantly city-owned and the costs associated with complying with Intro. 261 would be borne by the city. The shore side infrastructure presents a wide variety of construction and design types to meet requirements of tide, current, vessel use, and space limitations. Piers are built to match vessels of varied size, service and number of vessels using a particular facility. The basic engineering and design types are limited, but the diversity of arrangement and accommodation nearly matches the number of existing vessels. In order to estimate of the cost of complying with the provisions of Intro. 261, an inventory of the current state of all existing piers would be required.

In order to determine the incremental costs of providing access—the additional costs of fully accessible system relative to existing industry standards for pier construction—each individual situation would be top be calculated.

---

<sup>2</sup>U.S. Architectural and Transportation Barriers Compliance Board. *Access for Persons with Disabilities to Passenger Vessels and Shore Facilities: The Impact of Americans with Disabilities Act of 1990. Final Report.* Office of the Secretary of Transportation, Office of Environment, Energy and Safety, Environmental Engineering Division, 1996.

Sections 19-704, 705, and 706 of Intro 261 require the city to ensure that its shoreline facilities are accessible to persons with disabilities, including those in wheelchairs, blind or sight impaired, deaf or otherwise hearing impaired, mute or otherwise speech impaired; each means of embarking and disembarking shall be accessible, and 706 defines “accessible means.” Manmade and environmental height barriers for wheelchair passage are the major considerations in cost calculations contained in the U.S. Department of Transportation report referenced above. Other disabilities are included in the cost calculations, but make up a small portion of the total. Access solutions include extra long gangways, fixed intermediate ramps, extra floating docks, and accessible gangways to the vessels’ decks. Costs of the solutions presented were developed with all pertinent safety features and ADAAG specifications in mind and track closely the requirements of Intro. 261. The net unit costs for access solutions range from \$20,000 to \$328,000, depending on barrier height differences to be overcome. The high-end estimate assumes a 10-foot tide difference and 15-foot tidal surges requiring a 120-foot fixed ramp, a 180-foot fixed ramp, and supporting float. If the average conditions at the various piers in the city are taken to be a 5-foot height difference (with accommodation for up to 7 feet difference on rare occasions), the solution calls for the use of a 60-foot accessible gangway and a 12-foot accessible boarding gangway at a net cost per unit of \$21,000. In order to calculate the total cost, the required number of the various access solutions would need to be determined for each pier.

It is beyond the scope of this analysis to determine the cost of compliance for shore facilities in New Jersey, but the basic assumptions are the same cost premiums for accessible construction.

All projects currently planned by EDC to upgrade city piers are assumed to contain provisions for access by the disabled. However, we were not able to gather sufficient information to determine whether they will meet the complete standards under Intro. 261. It is assumed that the EDC projects will comply with many, if not all, of the requirements promulgated in the legislation.

**Vessels.** The cost of retrofitting or replacing vessels is the responsibility of the private ferry operators. Projected costs for implementation of the regulations include compliance-driven increases in the cost of new vessels and the cost of retrofitted access features during major alterations of vessels. Additionally, revenue losses may occur during periods of peak demand due to the reduced onboard capacity resulting from providing space for accessible accommodations, and a small increase in annual fuel consumption is anticipated for new construction. The capital cost estimates provided in the Compliance Board report for short trip length commuter vessels (Class T Commuter/shuttle) do not include toilets, food service areas, or elevators since this class of short trip vessel often does not contain these features. Intro. 261 exempts vessels less than 48 feet long from toilet access requirements but larger vessels must comply. The unit capital cost of alterations is estimated at \$15,000. The unit capital cost for new

construction is estimated at \$13,400. The legislation requires each vessel to carry at least one evacuation chair at an approximate cost of \$500 each and to have at least one crew member on board trained in using the chair to aid a disabled person in an emergency. The number of vessels in each private ferry fleet would need to be known along with a detailed inventory of pertinent information on the configuration of each vessel relating to accessibility, as well as the projected replacement schedule for each fleet. This determination is beyond the scope of this report, but given the modest unit capital cost estimates the magnitude of the investment required by private ferry operators is not likely to be high.

***Timeframe for compliance.*** The proposed legislation would take effect immediately upon passage, with all necessary retrofitting to be completed 180 days from the effective date. Given the normally long timeframes of capital projects, including the shoreline facilities and changes to vessels, it may prove very difficult and expensive to meet the retrofitting deadline. A certain number of aging ground transportation vehicles and marine vessels scheduled to be replaced with new construction would be replaced rather than retrofitted. Currently scheduled retrofitting, rebuilding, and new construction of piers may not be completed within the compliance window time constraints; depending on the date the law takes effect and how much of the EDC shoreline facilities plan has been completed.

***Enforcement and reporting requirements.*** The city's Commission on Human Rights and the Department of Transportation are required by Intro. 261 to provide the Mayor and City Council with biannual reports on compliance and non-compliance. Civil penalties of between \$250 and \$5,000 per violation for each day the violation continues. There will be some costs to the city for the creation of mandated reports, enforcement personnel, and data collection on the accessibility of city-owned shoreline facilities, and private ground transportation and vessels.