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U.S. Department of the Interior

Governors Island National Monument
New York, New York

Governors Island
Alternative Transportation Study
Support to General Management Plan

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Contents

Report notes

This report was prepared by the U.S. Department of Transportation John A. Volpe National Transportation Systems Center, in Cambridge, Massachusetts. The project team was led by Eric J. Plosky, of the Service and Operations Assessment Division, and included Michael G. Dyer, of the Technology Applications and Deployment Division, Carson D. Poe, Katherine S. Fichter, and Jeffrey Bryan, of the Planning and Policy Analysis Division, Robert Armstrong, of the Service and Operations Assessment Division, and Eric Weiskotten, of EG&G Technical Services.

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Definitions

The following terms are used in this report:

ADA	Americans With Disabilities Act
AT	Alternative transportation
ATP	Alternative Transportation Program
ATS	Alternative transportation system
BBB	Beyer Blinder Belle
CLR	Cultural Landscape Report
DCP/EA	Development Concept Report/Environmental Assessment
DOT	Department of Transportation
DSC	Denver Service Center (National Park Service)
GIPEC	Governors Island Preservation and Education Corporation
GMP	General Management Plan
GOIS	Governors Island National Monument
NEPA	National Environmental Policy Act
NPNH	National Parks of New York Harbor
NPS	National Park Service
RPA	Regional Plan Association

Section 1: Introduction

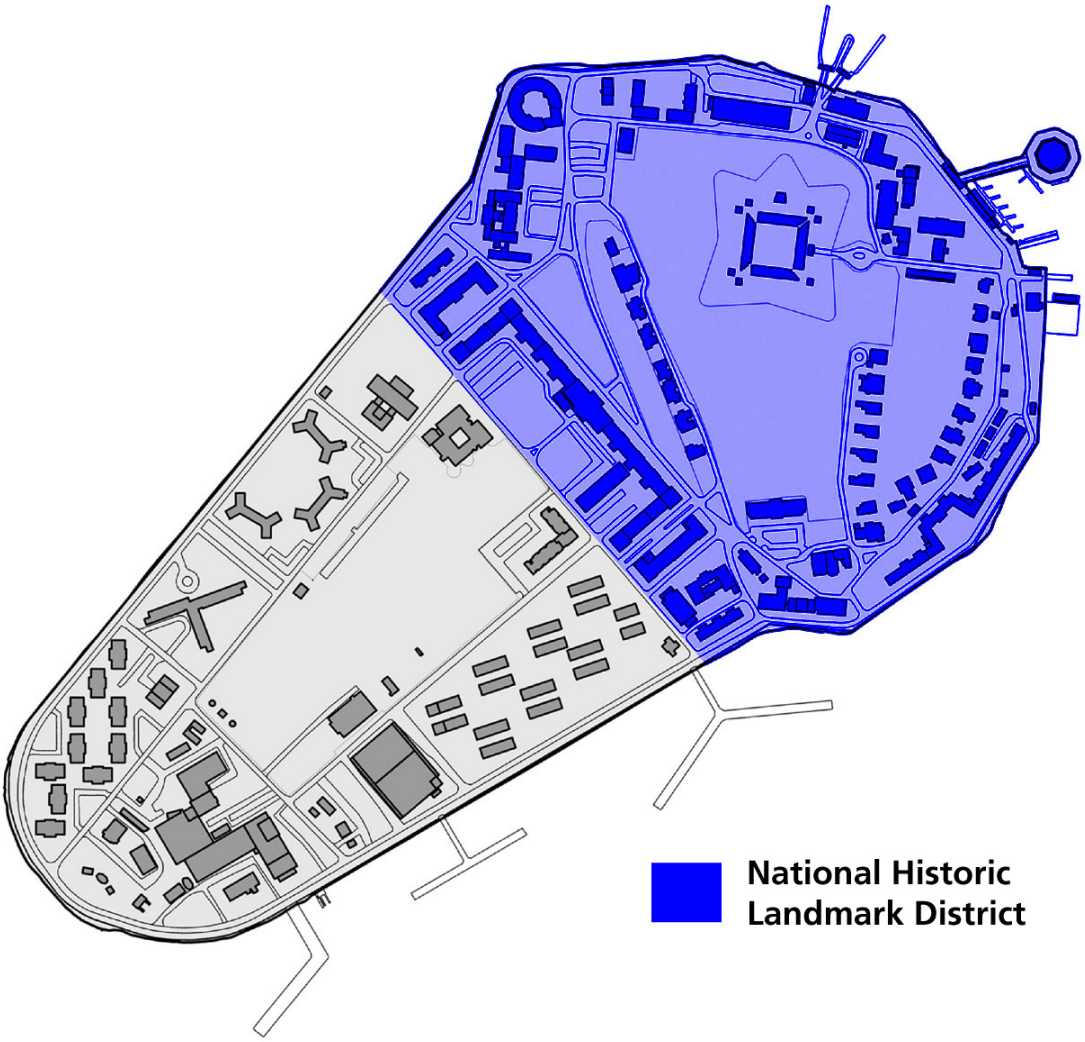
A new national park, established by presidential proclamations in 2001 and 2003, Governors Island National Monument is located in the heart of New York Harbor. For more than 300 years an important military fortification, Governors Island is now, for the first time in its history, planning to open to the public.

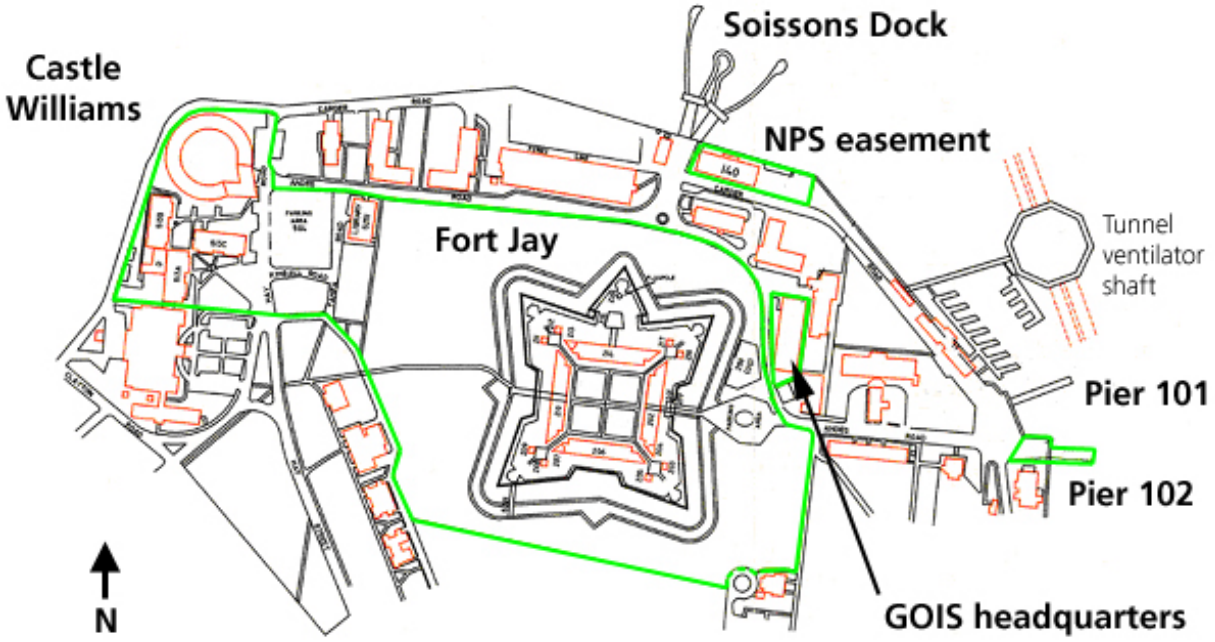
Governors Island overview

Governors Island is a 172-acre island located in New York Harbor, only several hundred yards from the southern tip of Manhattan and just across the Buttermilk Channel from Brooklyn. For centuries, it was a military fortification, administered by the U.S. Army and subsequently by the U.S. Coast Guard. In 1997, the Coast Guard vacated the island, clearing the way for public use. Presidential proclamations in 2001 and 2003 transferred 22.78 acres of the island—including the historic Fort Jay and Castle Williams—to the National Park Service (NPS) as Governors Island National Monument (GOIS); the remainder of the land, including a National Historic Landmark District that encompasses the national monument, was transferred to the Governors Island Preservation and Education Corporation (GIPEC), an organization formed to represent New York State and New York City interests in the island.

Figure 1
Governors Island

Figure 2
Governors Island detail; Governors Island National Monument





Governors Island National Monument comprises four discontinuous areas (as seen in the figure on the previous page). Fort Jay and Castle Williams are included in the largest land tract; the GOIS headquarters building and the NPS-owned dock, Pier 102, are separate tracts. NPS has also been granted an easement to Building 140, adjacent to Soissons Dock, at the northern tip of the island.

The island was first opened to the public, on a limited basis, during the summer of 2003, for ranger-guided tours. Limited public access—ranger tours, as well as visitor access to the western esplanade—was also allowed during the summer of 2004. Visitation limits to date derive from logistical and staffing constraints and the lack of developed visitor facilities, programs, and services on the island.

NPS General Management Plan and GIPEC planning

As of the writing of this report (fall 2004), both GOIS and GIPEC are engaged in planning efforts aimed at determining how Governors Island will be developed. As a new unit of the National Park Service, GOIS is preparing its first General Management Plan (GMP), which will serve as the foundation document for all planning, implementation, and management activities.

Alternative transportation study and goals

This report, funded by the NPS Alternative Transportation Program (ATP), was commissioned in conjunction with the GMP. As a high-level transportation study, it was intended to inform the GMP planning process and to aid in the conception and development of preliminary GMP alternatives (ranging from no action to various implementation possibilities). Since, as an island park, GOIS is entirely dependent on water transportation, development of transportation and interpretive/thematic alternatives is an iterative process, with analysis in one area leading to more focused thinking in the other.

Specific goals of the transportation study, as enumerated in the project statement of work, include:

- Investigate ferry service alternatives, including potential roles of GIPEC, the National Parks of New York Harbor (NPNH), other governmental agencies, and private ferry operators;
- Address water transportation services currently available in New York Harbor, or that are projected to be operating in the near future, and the advantages/disadvantages of contracting with one or more of them;
- Analyze opportunities and cost efficiencies in combining water transportation services to Governors Island with services to other harbor attractions, and with commuter services to New Jersey, Manhattan, Queens and Brooklyn;
- Address off-island staging;
- Examine the interface between water and land transportation facilities;
- Discuss on-island land transportation options, including potential utility of jitney-type vehicles/services provided at other national parks, other attractions, and large cities;
- Discuss the potential for private sector investment.

All of these goals are intended to be discussed in more detail in a follow-on "Phase II" planning effort, which would seek to create an alternative transportation plan for implementation based on the preferred GMP alternative (which, as of this writing, has not yet been identified). This study establishes the framework for that more detailed discussion.

The study goals draw upon the choosing-by-advantages factors used by NPS to evaluate alternative transportation planning and implementation projects:

- Addressing a clearly defined need/problem, tied to existing planning documents and park purpose. *(Planning factor only.)*
- Protection of natural and cultural resources.
- Protection of public health, safety, and welfare.
- Improvement of visitor enjoyment through better services and educational and recreational opportunities.
- Improvement of park operational efficiency, reliability, and sustainability.
- Provision of other advantages (e.g., partnerships) to the national park system.

Study approach

The approach used in this study is as follows:

First, *current conditions* were analyzed. Water transportation services currently provided in New York Harbor were inventoried, with an eye to assessing the context within which transportation to Governors Island will be operating. *Stakeholder partnership opportunities* were identified as part of this process, in order to determine what opportunities exist to form or strengthen partnerships for the coordination of transportation planning and the provision of better travel information to park visitors. Stakeholders include GIPEC, the current water transportation providers in New York Harbor, the other National Parks of New York Harbor, and various transportation-related agencies and other groups. *Relevant stakeholder water transportation planning initiatives* were also identified. Rounding out the current-conditions analysis, the condition of the GOIS-owned dock, Pier 102, was also assessed; a marine engineer under contract to the National Park Service Northeast Region traveled to the island to determine what improvements would be necessary to render the dock usable.

Relevant *Governors Island visitation predictions* were obtained from the Regional Plan Association (RPA). These are the only visitation predictions used as part of this study; it was beyond the study scope to independently predict visitation to GOIS or to the island as a whole. (As of September 2004, GIPEC was considering the creation of new visitation predictions.) These data permitted discussion of what the future transportation burdens upon Governors Island are likely to be.

Based on this information, a list of *transportation elements* was generated. The elements, analogous to the items on a restaurant menu, refer to specific actions that the park could take relative to transportation. (Detailed technical assessments of the elements could be appropriate as part of a "Phase II" follow-on.)

A number of *transportation alternatives* (or "*scenarios*") were then created by selecting one or more transportation elements to form different combinations, in line with the preliminary *Governors Island GMP alternatives* under consideration at the time this report was prepared. Each scenario was then subjected to the study evaluation criteria, based on the ATP planning and implementation factors. As a preliminary investigation, this study does not identify a "preferred" transportation alternative; however, one could be selected by the GMP team as part of the process by which formal draft GMP alternatives are identified and a preferred GMP alternative is selected. The necessary environmental compliance and documentation activities could then be completed as part of the GMP process.

The study closes by suggesting *preliminary action items for implementation*, which, though not a recommended implementation of a preferred transportation alternative, highlight broader actions the park can take with respect to areas such as stakeholder partnerships, data collection, project funding opportunities, and implementation of selected alternative transportation enhancements.

Throughout the course of the study, GOIS staff, as well as the other members of the GMP project team, provided extensive input and review. The study proceeded in line with the GMP effort; project deadlines and deliverables were synchronized wherever possible to take advantage of meetings, public workshop sessions, external NPS deadlines, staff availability, and review opportunities. (Because the GMP schedule proceeded differently than had been assumed, and Volpe Center involvement in GMP planning and coordination meetings, as directed by the GOIS superintendent and NPS planning staff, was much greater than anticipated, there are some variations from the original study statement of work, particularly as regards the study timeline.)

Study assumptions

This study assumes several conditions, including:

- Transportation in the New York area remains generally the same, with no major improvements or impediments introduced to the highway, roadway, surface transit, or water transportation systems.
- Economic conditions do not drastically improve or worsen. (Generally, this assumption is broadly taken to include matters such as the price of fuel and economic-related traveler behavior.)
- Visitation to GOIS, and to Governors Island as a whole, is along the lines of the Regional Plan Association's predictions (discussed later in this report), or at least in line with GOIS staff expectations—that is, there are no enormous variations from the visitation levels anticipated.
- NPS policy supports partnerships with external stakeholders and other appropriate organizations. At the same time, however, in the absence of formal commitments from external partners, cooperation (including the provision of transportation or other services) cannot be guaranteed.
- NPS policy supports the expansion of alternative transportation systems, where appropriate.
- NPS policy, at least in the Northeast Region, discourages or prohibits the expansion of automobile facilities, including roadways and parking areas.
- ATP policy disallows the direct NPS funding of alternative transportation operations.
- For the most part, ATP policy disallows investments in transportation infrastructure beyond NPS boundaries.
- Other relevant NPS policies, practices, funding eligibility criteria, etc., remain essentially unchanged.

These assumptions are further explained in the relevant sections of this report.

Report structure
The structure of this report reflects the study approach taken:

- Section 2 discusses current conditions on Governors Island and in New York Harbor, outlines stakeholder planning initiatives and potential partnership opportunities, and also presents information on other national parks accessible only by water transportation ("comparables").

- Section 3 presents the transportation elements.

- Section 4 presents the transportation alternatives assembled from the transportation elements, correlated to the preliminary General Management Plan alternatives currently under consideration. (Formal draft GMP alternatives have not yet been defined.) This section also discusses the differences in how each alternative appears to address transportation services to Governors Island. Each alternative is structured in line with the ATP planning and implementation factors. The Regional Plan Association's visitor estimates for Governors Island are also presented.

- Section 5 outlines preliminary action items for implementation that GOIS can consider as it moves forward.

- Appendices A1 and A2 include additional information produced by David Porter, of Childs Engineering, detailing schematics and cost estimates for improvements to the NPS-owned dock, Pier 102.

- Appendix B includes information on "comparable" national parks and other areas accessible only by water transportation:

    - Appendix B1 includes details culled from the GMPs of the other national parks accessible only by water transportation.

    - Appendix B2 presents selected data (size, visitation, transportation management arrangements) from "comparable" national parks and similar non-NPS areas.

    - Appendix B3 is a summary of visitation data for comparable parks.

- Appendix C1 shows the detailed visitor projections calculated by the Regional Plan Association. Appendix C2 provides more details on the three preliminary GMP alternatives under consideration.

- Appendix D provides details on the transportation elements and transportation alternatives.

- Appendix E presents a detailed list of current New York Harbor ferry routes, including major service characteristics (operator, schedule/frequency, fare, boat type), as available.

- Appendix F presents detailed route-by-route ridership information, based on data provided by the New York City Department of Transportation.

Section 2: Current conditions

This section discusses current transportation conditions on Governors Island and in New York Harbor, outlines other relevant transportation planning initiatives and potential stakeholder opportunities, and also presents information on other national parks accessible only by water transportation.[*]

The first step in any transportation-planning process is to comprehensively inventory and characterize existing transportation infrastructure and services—the current conditions. In this case, that refers to:

- The status of the existing New York Harbor ferry system, especially in connection with visitation to the National Parks of New York Harbor (NPNH);
- The condition of the ferry docks used for access to Governors Island, especially the NPS-owned Pier 102;
- Noteworthy trends in ferry planning, especially since the terrorist attacks of September 11, 2001.

This section also discusses several locations—the eight other national parks accessible only by water transportation—that may be usefully compared to the case of Governors Island.

Current conditions of the New York Harbor ferry system

Due to its orientation to the sea and long history of maritime activity, New York Harbor makes a natural candidate for the contemporary use of water transportation. Although the second half of the twentieth century saw the decline of New York Harbor as a major industrial and transportation hub, the area is currently experiencing a renaissance of interest in water transportation. Ferries have again become an important way of moving people among the five boroughs of New York City, portions of New Jersey, and the recreational and cultural sites of New York Harbor. Ferry ridership has greatly expanded in the past several years, and new routes, vessels, and services are regularly being added to the water transportation network. New York Harbor has become the locus of several major planning efforts, including efforts led by the National Park Service, and water transportation is a key component of those plans. As the New York metropolitan region is unlikely to see additional bridge or tunnel projects in the foreseeable future, ferries have become a low-cost and flexible way to add capacity to the transportation network.

This trend greatly accelerated in the period following the terrorist attacks of September 11, 2001, and again after the blackout of August 2003; both of these events highlighted the vulnerabilities of the existing transportation system and the flexibility and quick-response capabilities of ferries. The 9/11 attacks had a particularly dramatic impact on ferry usage in New York Harbor. With the public transit and roadway systems of Lower Manhattan severely disrupted, with commuter service to New Jersey all but cut off, and commuting patterns radically altered across the region, many turned to ferries as a viable alternative for traveling in and out of New York City. Ferries met the challenge, with one operator carrying 160,000 people from Manhattan Island on the day of the attacks.[†]

The significant increase in demand for water transportation that began on 9/11, although reduced from the period immediately following the attacks, has remained steady. One operator reported an average increase in daily ridership of 19,000 passengers in the period since 9/11.[‡] The electrical blackout of August 2003 again proved the importance of ferries, the only form of public

[*] Much of this section was first made available in the draft "Baseline Conditions Report" of January 31, 2004.
[†] Associated Press, August 15, 2003.
[‡] *New York Times*, July 2003.

transportation to function reliably during the loss of power. One ferry operator carried as many as 200,000 passengers on the afternoon of the blackout.*

Ferries offer many advantages for both operators and passengers. Thanks to their limited fixed infrastructure, ferries are flexible, allowing routes to be changed, service to be added or reduced, and schedules to be modified, all with minimal effort and expense. The flexibility of ferries and the low-cost nature of their services—particularly in comparison to capital-intensive road or transit projects—offer a level of responsiveness that is essential to a modern transportation system. Ferries can also serve multiple audiences—commuters during the week and recreationalists on the weekends—without significantly inconveniencing either group.

Lastly, water transportation offers a unique perceptual advantage, that of viewing the skyline of New York City and its surrounding landscape from the sea. For recreationalists and commuters alike, the opportunity to experience New York Harbor from the water can be an important opportunity to connect with the maritime history and heritage of the New York region.

Routes and ridership

Figure 3, on the next page, shows water transportation routes in New York Harbor as of January 2004. (Figure 4, on the following page, shows the same information, but zoomed in and around Governors Island.)

* Associated Press, August 2003.

Figure 3
New York Harbor water transportation routes, January 2004
Source: Volpe Center; route and terminal data courtesy Metropolitan Waterfront Alliance, NYPIRG Community Assistance Project

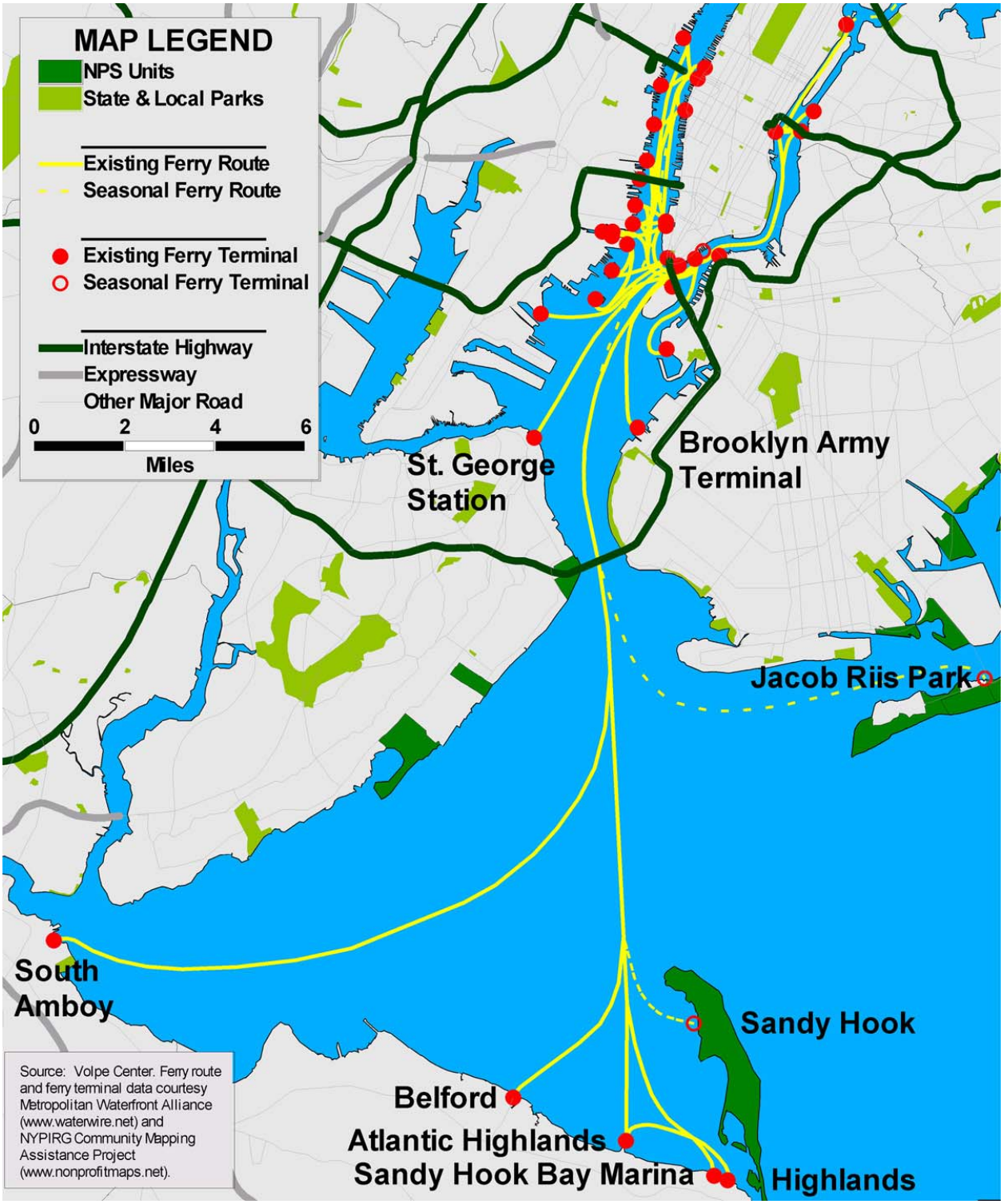
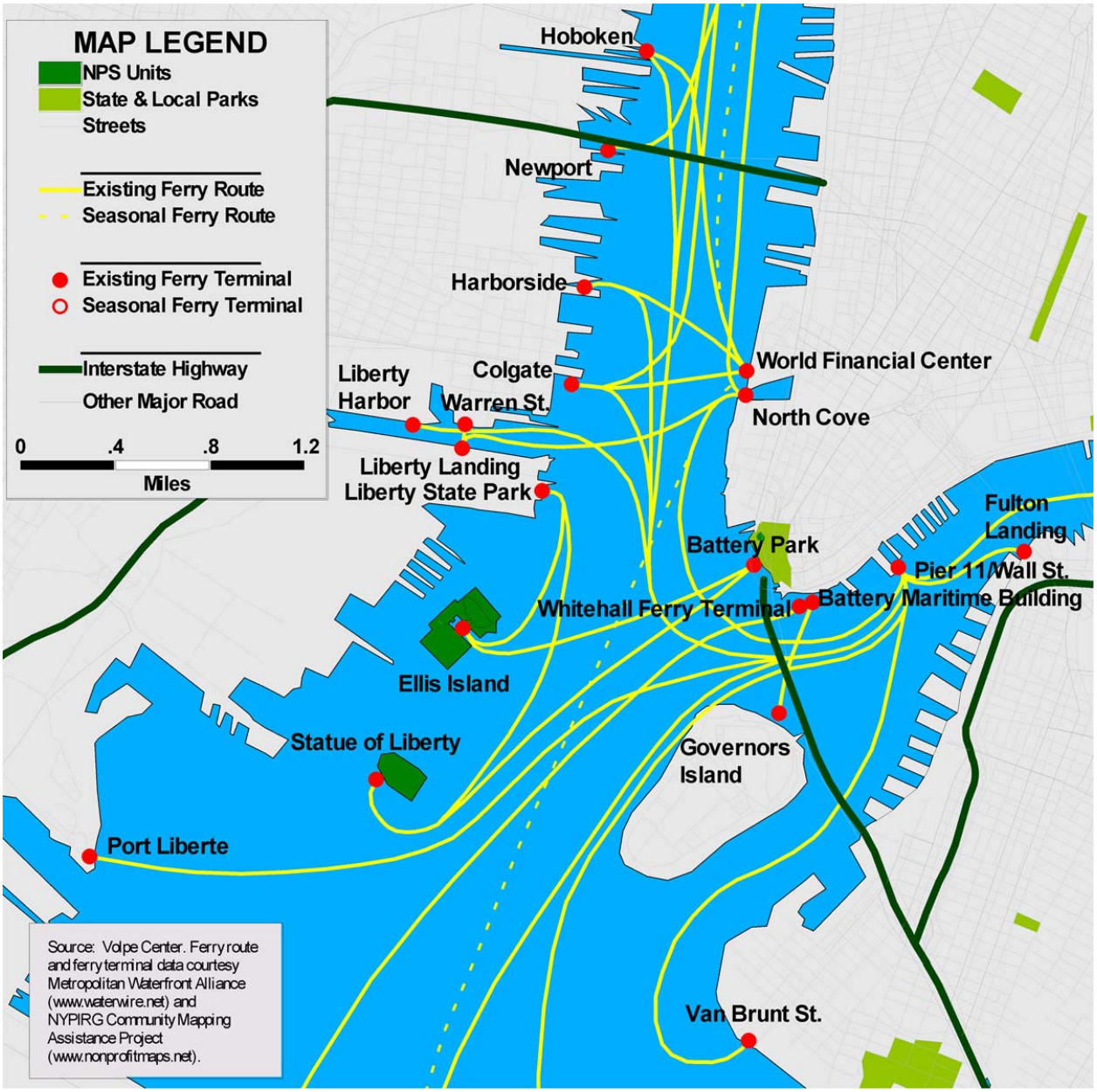


Figure 4
New York Harbor water transportation routes, January 2004 (detail)
Source: Volpe Center; route and terminal data courtesy Metropolitan Waterfront Alliance, NYPIRG Community Assistance Project



In addition to the New York City Department of Transportation, which runs the Staten Island Ferry, and the Governors Island Preservation and Education Corporation (GIPEC), which operates the current service to Governors Island, there are a number of private companies currently operating ferry service in New York Harbor. These include New York Waterway, SeaStreak America, and New York Water Taxi, which primarily serve commuters, and the Circle Line, which primarily serves leisure passengers, including those traveling to Statue of Liberty National Monument and Ellis Island. Existing routes and operators are summarized on the next page.

Figure 5
New York Harbor water transportation routes and operators, January 2004

Route	Operator
Atlantic Highlands/Highlands	SeaStreak
Colgate/W 38 St	New York Waterway
E 34 St/E 90 St	New York Water Taxi
E 34 St/Hunters Point	New York Water Taxi
East River Shuttle	New York Water Taxi
Battery Park/Ellis Island	Circle Line-Statue/Ellis
Liberty State Park/Ellis Island	Circle Line-Statue/Ellis
Governors Island	GIPEC
Hoboken N/W 38 St	New York Waterway
Lincoln Harbor/W 38 St	New York Waterway
Newport/W 38 St	New York Waterway
North Cove/Liberty Landing	Liberty Landing Water Taxi
North Cove/W 23 St	New York Water Taxi
Pier 11/Atlantic Highlands	SeaStreak
Pier 11/Belford	New York Waterway
Pier 11/Brooklyn Army Terminal	New York Water Taxi
Pier 11/Colgate	New York Waterway
Pier 11/Fulton Landing	New York Water Taxi
Pier 11/Harborside	New York Waterway
Pier 11/Highlands	SeaStreak
Pier 11/Hoboken S	New York Waterway
Pier 11/Hunters Point	New York Water Taxi
Pier 11/Liberty Harbor	New York Waterway
Pier 11/North Cove	New York Water Taxi
Pier 11/Port Liberte	New York Waterway
Pier 11/Sandy Hook Bay Marina	SeaStreak
Pier 11/South Amboy	SeaStreak
Pier 11/Weehawken	New York Waterway
Staten Island Ferry	New York City
Battery Park/Statue of Liberty	Circle Line-Statue/Ellis
Liberty State Park/Statue of Liberty	Circle Line-Statue/Ellis
W 43 St/W 23 St	New York Water Taxi
Water's Edge Restaurant Ferry	Water's Edge Restaurant
Weehawken/W 38 St	New York Waterway
WFC/Colgate	New York Waterway
WFC/Hoboken	New York Waterway
E 34 St/Fulton Landing	New York Water Taxi
Pier A/North Cove	New York Water Taxi
Pier A/Pier 11	New York Water Taxi
E 34 St/South St	New York Waterway
South St/Riis Landing	New York Waterway
Pier 11/Sandy Hook Bay Marina	SeaStreak
E 90 St/Yankee Stadium	New York Waterway
E 90 St/Worlds Fair Marina (Shea)	New York Waterway
Weehawken/Hoboken	New York Waterway
Hoboken/South St	New York Waterway
Highlands/Worlds Fair Marina (Shea)	SeaStreak
Highlands/Yankee Stadium	SeaStreak
E 34 St/Pier 11	SeaStreak

(The routes listed are described in more detail in the report appendices. Most routes are characterized by frequent, scheduled departures tailored specifically to either the commuter or recreational markets.)

The municipally-operated Staten Island Ferry claims nearly half of the average weekday commuter ferry ridership, with 60,000–70,000 passengers on a typical workday. The remainder of ferry ridership is accounted for by private operators. Each of these operators has developed its own set of routes and services and operates independently, but together they provide a complex network of water transportation, criss-crossing New York Harbor with ferry routes that connect to the regional system of roadways, parking facilities, and public transit stations (as shown in Figures 3 and 4).

The figures below illustrate private ferry ridership in New York Harbor in recent years.

Figure 6
Monthly private ferry ridership in New York Harbor, January 2002–May 2004
Source: New York City Department of Transportation, Office of Private Ferries

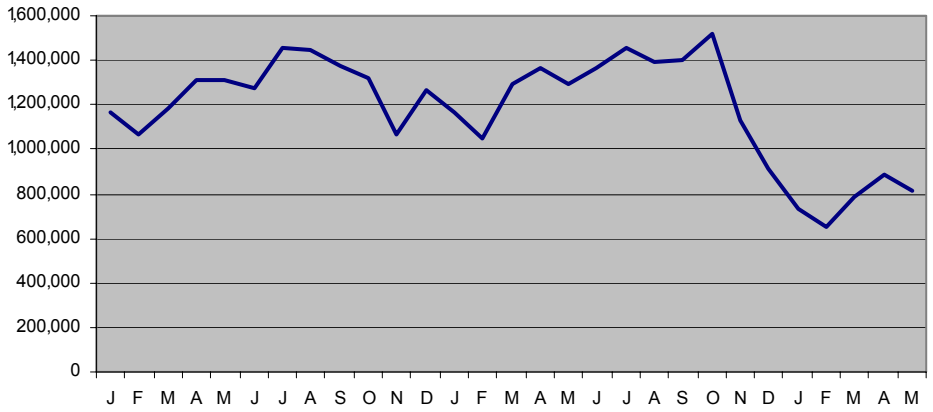


Figure 7
Average daily private ferry ridership by month, January 2002–May 2004
Source: New York City Department of Transportation, Office of Private Ferries

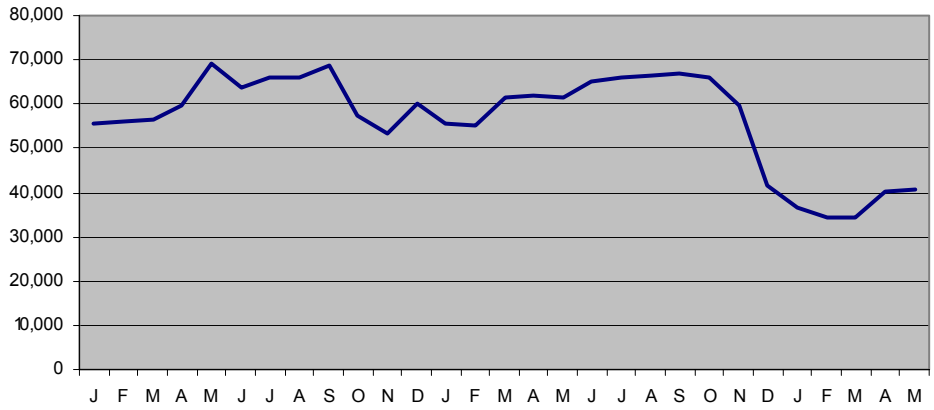
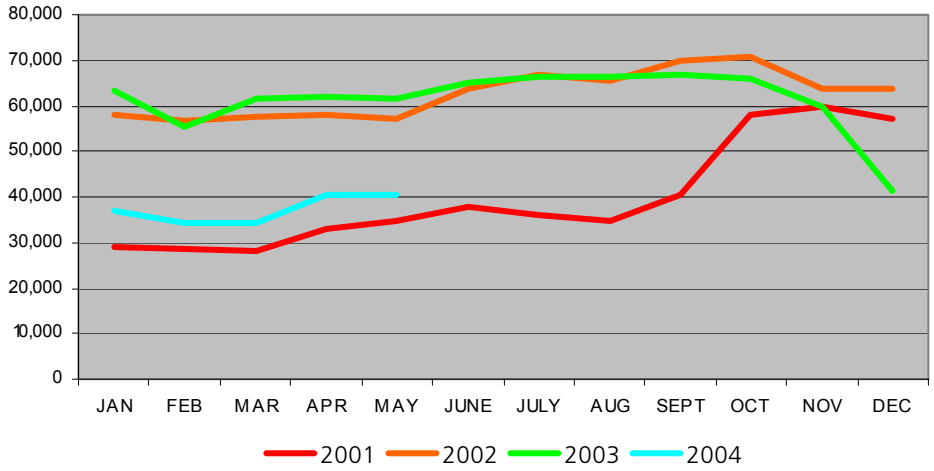


Figure 8 allows for readier year-to-year comparisons. Note the surge in ridership following 9/11, in September and October of 2001, due largely to the severing of the PATH link between New Jersey and Lower Manhattan. When the PATH link reopened, in the fall of 2003, ridership fell. However, ridership remained steady thereafter, at levels higher than in (pre-9/11) 2001.

Figure 8
Average daily private ferry ridership by month, January 2001–May 2004
Source: New York City Department of Transportation, Office of Private Ferries



Overall, ferry ridership has grown steadily for several years, even though both tourism and employment in the New York region declined in the period following 9/11. Most notably, ridership on those routes serving commuters—routes between New Jersey and Manhattan, for instance—has grown since the late 1990s, demonstrating the increasing importance of water transportation to the overall transportation system of New York. SeaStreak America, for example, according to its own information, carried more than 2.5 times as many passengers on its commuter routes in 2002 as it did in 1998, with an average annual growth rate of 27.4%.

Note on New York Waterway
New York Waterway, by far the largest private operator, was in extreme financial trouble as of December 2004, apparently owing to overexpansion, and overindebtedness, following 9/11. Although several proposals are now being considered by public agencies to provide operating assistance to the company, its future is uncertain. Major changes to the water transportation environment in New York—particularly including New York Waterway's possible liquidation—could have serious repercussions on the Governors Island transportation planning process.

National Parks of New York Harbor ferry ridership
Many routes, such as the Staten Island Ferry, are operated on weekends and see significant ridership. Other routes—including most recreational services, such as those to the other National Parks of New York Harbor—see most of their ridership on weekends. Figures 9 through 12, below, show ferry ridership to Statue of Liberty National Monument and Ellis Island and to Gateway National Recreation Area.

Figure 9
Statue of Liberty/Ellis Island ferry ridership by year, 1990–2003
Source: NPS Public Use Statistics Office

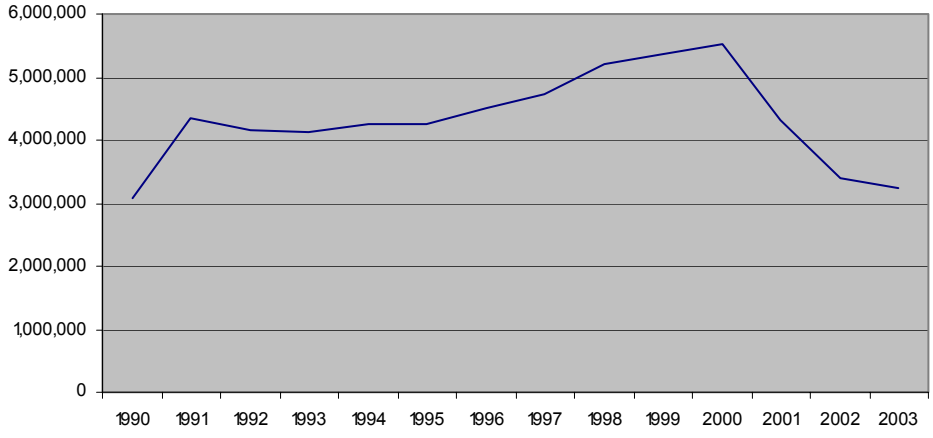


Figure 10
Statue of Liberty/Ellis Island ferry ridership by month, 1990–2003
Source: NPS Public Use Statistics Office

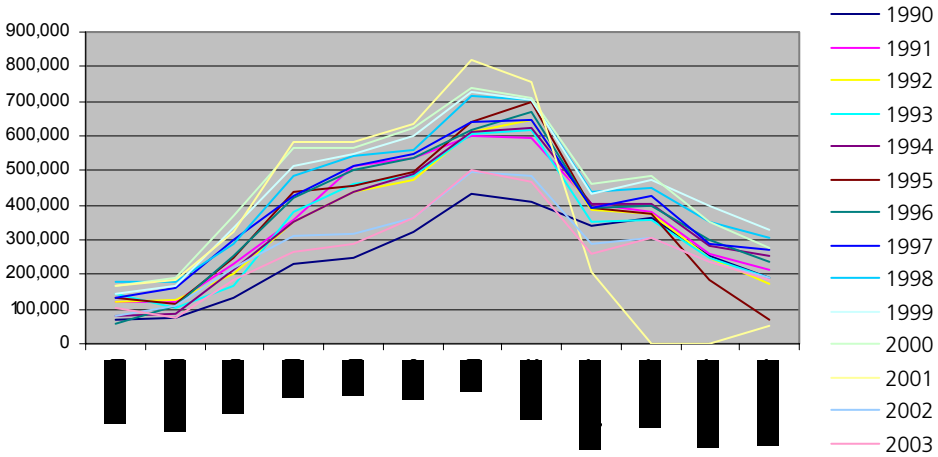
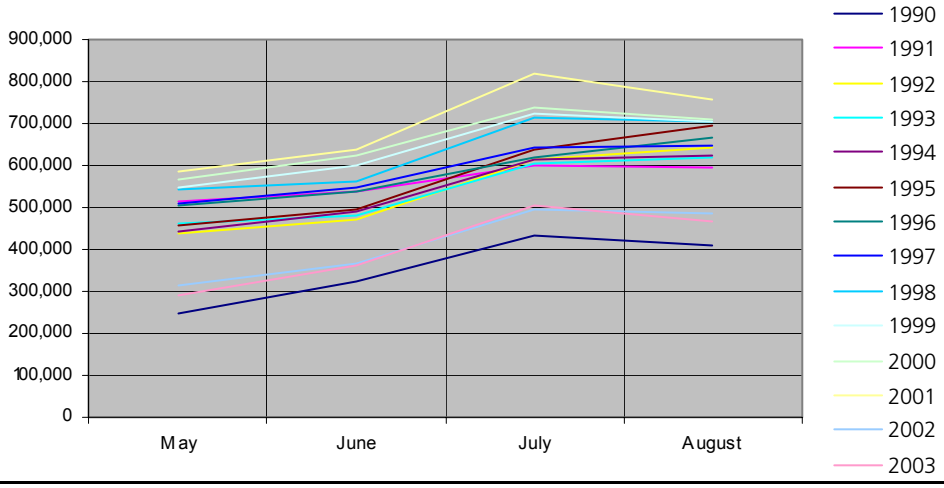
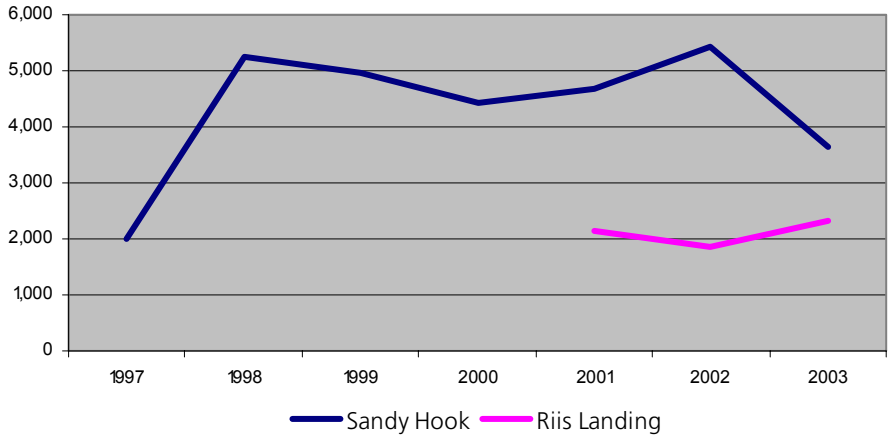


Figure 11
Statue of Liberty/Ellis Island peak-season ferry ridership by month, 1990–2003
Source: NPS Public Use Statistics Office



Note the growth in visitation through the summer of 2001, and the subsequent, post-9/11 drop. It is widely believed that this fall is directly attributable to the closure of facilities at the Statue of Liberty and to the stringent new security procedures required of all ferry passengers—measures implemented following the 9/11 attacks. It seems likely that the reopening of the Statue itself (which took place during the summer of 2004), improvements to the security process, and improvements to the ferry terminal at Battery Park (or the substitution of improved facilities), would cause ridership to increase.

Figure 12
Gateway (Sandy Hook and Riis Landing) ferry ridership, 1997–2003
Source: NPS Public Use Statistics Office



Gateway ferry traffic, while expected to continue to increase, represents relatively few park visitors. However, visitation to Gateway—especially the Jamaica Bay unit—has been increasing significantly in recent years, and as Gateway improves its ferry terminals at Sandy Hook and at Riis Landing (see later in this section), ferry traffic may rise greatly.

Cruise-ship traffic

Cruise-ship traffic has also been increasing. A December 2003 article stated that the number of cruise passengers in New York soared 157.2 percent from 1998 to 2003, to a total of some 450,000—with an $800 million impact to the New York City economy. This traffic—up to 10,000 passengers a day during the peak cruise season—has led to discussions on how best to expand New York's cruise-ship terminal and passenger facilities, or whether such facilities might even be moved to alternate locations, such as Bayonne, New Jersey.[*]

Analysis: routes, ridership, operators

Overall, water transportation activity in New York Harbor, and interest in such activity, is at a very high level, much higher than even five years ago. The proliferation of operators and routes, the willingness of public agencies to accommodate and even invest in water transportation, and the growing public awareness and patronage of water transportation services all mean that the climate is favorable for further water transportation planning and service implementation.

There are some counter-examples:

- *Restricted public access to the Statue of Liberty* (especially its complete closure in the immediate wake of 9/11) has caused a sharp decrease in visitation there, with a consequent decrease in ferry ridership (over 1 million per year). However, with the restoration of some public access to the statue itself, from the summer of 2004, should cause the numbers to again increase.

[*] "Cruise Ships Drop Anchor, and Bayonne Gains Favor Over West Side." *New York Times*, December 29, 2003.

- *Reopening of the PATH connection between Lower Manhattan and New Jersey*, as discussed above, caused a notable fall-off in overall ferry ridership. However, ridership remains above pre-9/11 levels.

- *The 2003 crash of the Staten Island Ferry*, which killed several passengers, seems to have been perceived as an isolated incident, and has not appeared to significantly affect ridership either on the Staten Island Ferry itself or in general.

- *The 2004 capsizing of a harbor taxi in Baltimore Harbor* is another somewhat isolated case, but there are similarities to Governors Island. Fort McHenry National Monument and Historic Shrine in Baltimore (which will be discussed below as a "comparable" park) is served by a number of small harbor-taxi vessels, one of which capsized during a storm in the spring of 2004; several park visitors drowned, including a young child. Although ferry ridership decreased in Baltimore Harbor following the incident, and there was widespread national media coverage of the incident, no obvious effects on New York ferry ridership have been observed.

More detailed, route-by-route ridership data, made available from the New York City Department of Transportation (which collects data from operators), has been formatted and appears in the report appendices.

Current conditions of Governors Island transportation infrastructure

Dock inventory

Governors Island is ringed by several ferry docks, as shown in Figure 13, below.

- Pier 102 (also referred to in some documents as "Pier 100") is the only dock actually owned by the National Park Service, and hence by GOIS. (All other docks are administered by GIPEC.)

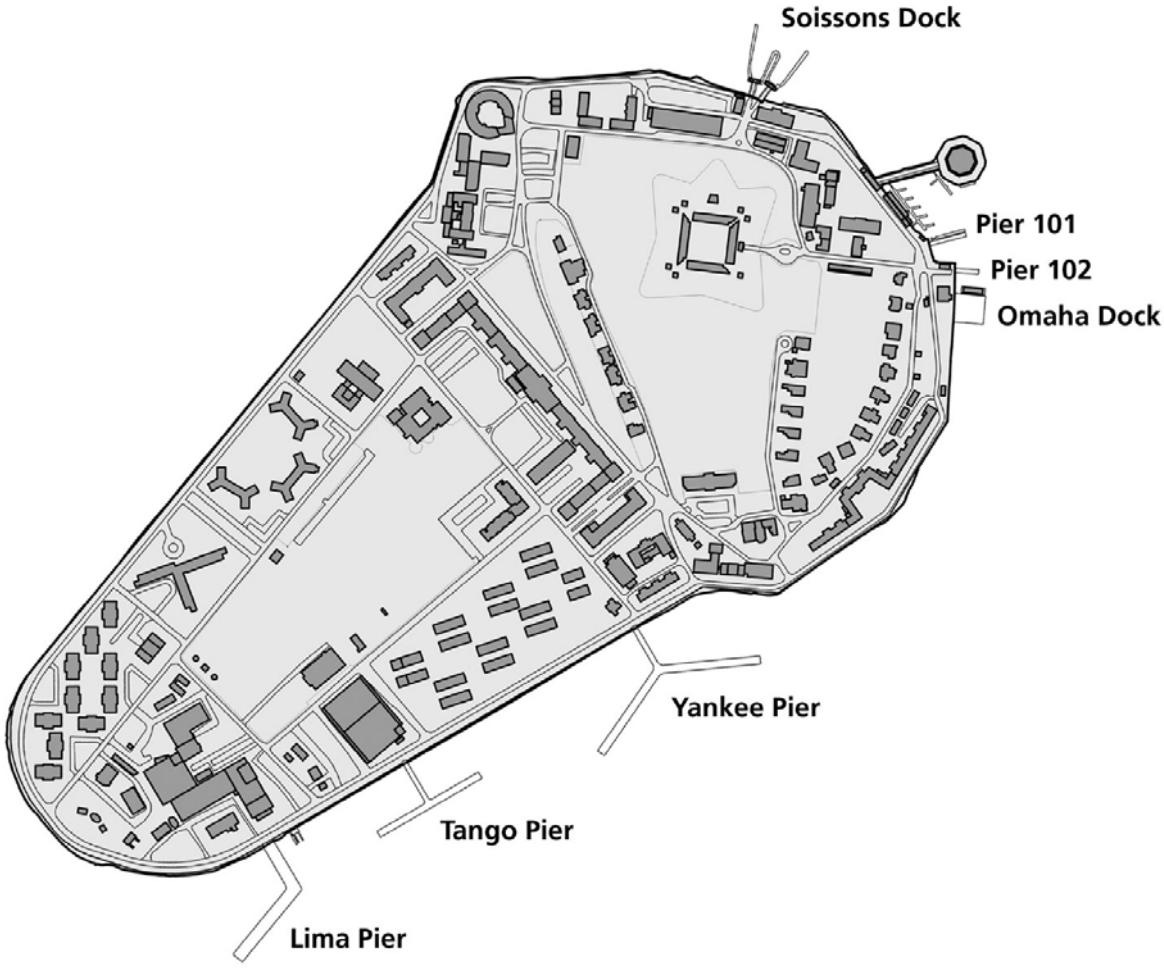
- Soissons Dock is currently used by the *Coursen*, the primary means of access to and from the island.

- Pier 101 is currently used by the *Swivel*, GIPEC's service and staff boat.

- The disintegrating Omaha Dock has not been used for some time.

- Yankee, Tango, and Lima Piers (so named for their shapes—Y, T, and L, respectively) were previously used to dock a variety of Coast Guard vessels and recreational craft. Deteriorating, they are almost completely unused today.

Figure 13
Governors Island ferry docks



Pier 102 condition and upgrades

On December 30, 2003, a site visit to Pier 102 was undertaken by NPS engineering consultant David Porter, of Childs Engineering Corporation. Pier 102 is a steel pipe pile concrete capped and concrete decked fixed pier, equipped by the U.S. Coast Guard with mooring bollards, utility stations (electrical, potable water, and sewerage), and a timber pile fender system on two sides. During its service with the Coast Guard, it appears to have been designed to house small Coast Guard vessels, probably in the 35- to 45-foot range. The two outshore ends of the pier are protected by 3-pile timber dolphins.

The figures below show several views of Pier 102.

Figure 14
Pier 102 overview

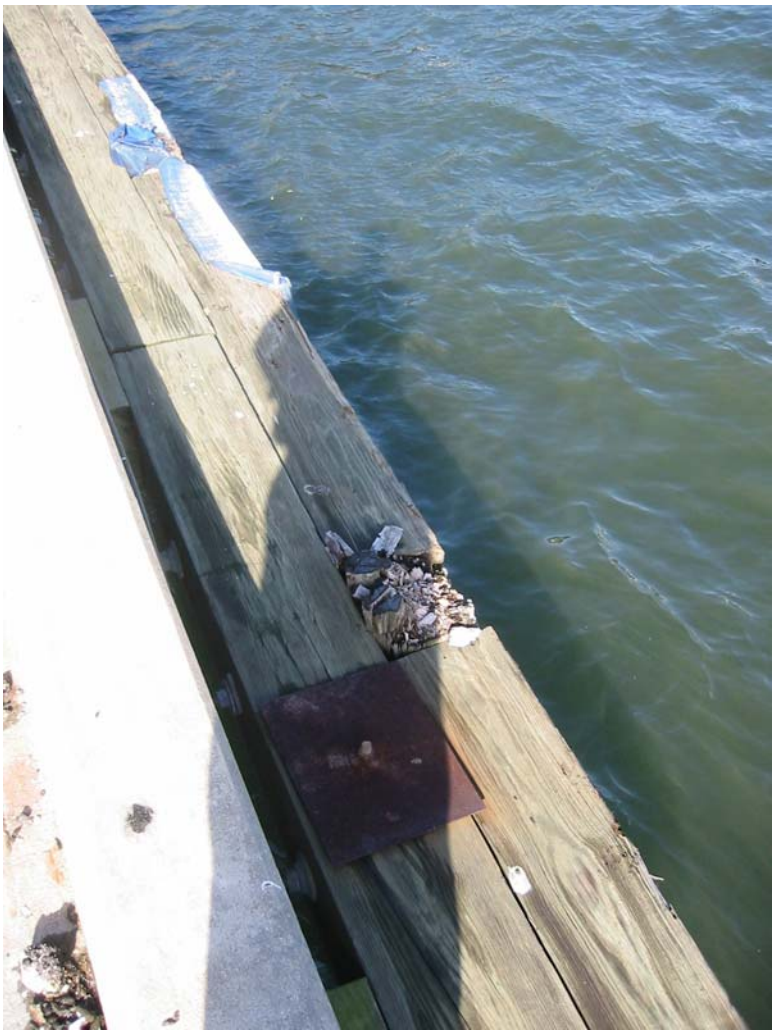
Figure 15
Pier 102; view of Pier 101 (with *Swivel* docked) and Manhattan skyline

Figure 16
Pier 102; view toward Fort Jay

Figure 17
Pier 102; detail view toward Fort Jay

It was estimated that the pier is less than 20 years old and the basic structure, based on above-water observations, appears to be in good condition. However, some of the utility stations show signs of degradation, and some of the fender piles in the timber fender system appear to be damaged.

Figure 18
Pier 102 detail; fender condition



The pier is approximately 100 feet long by 15 feet wide and extends perpendicular from the granite seawall at its base. Medallions along the seawall denote NPS ownership.

Figure 19
Pier 102; seawall detail

Figure 20
Department of the Interior property-boundary medallion on seawall

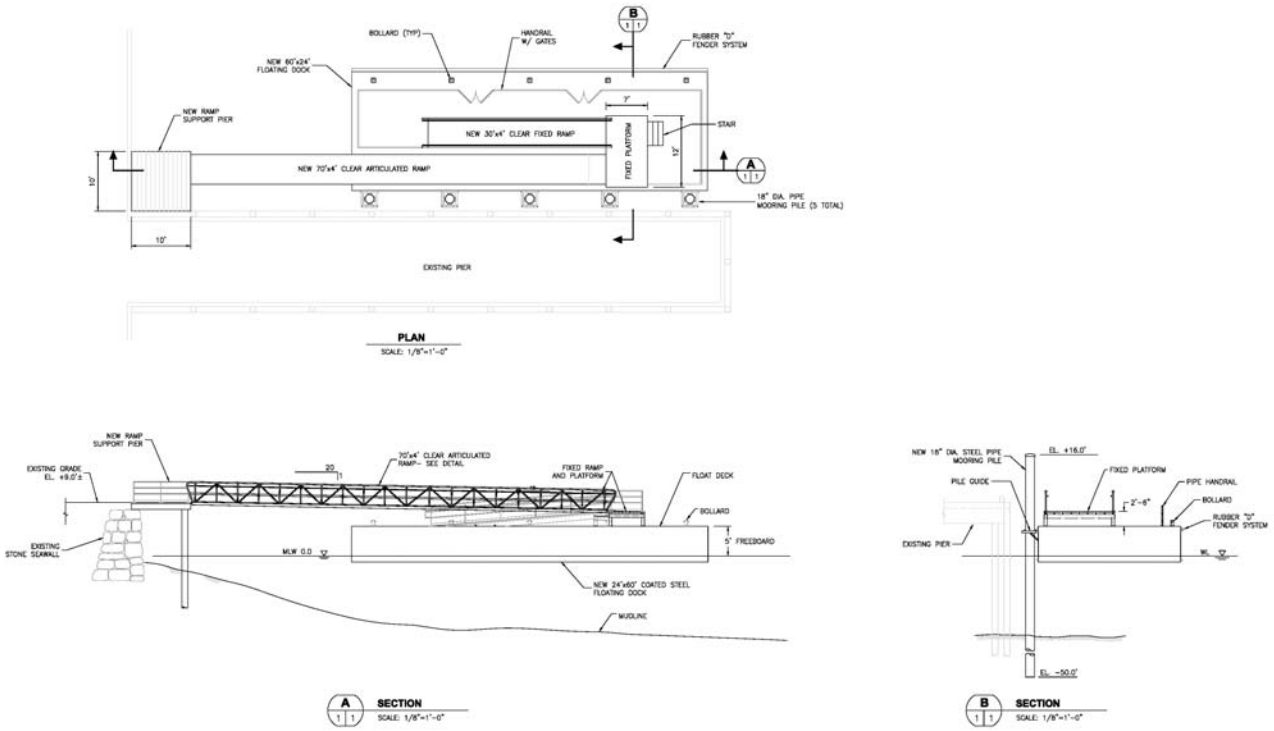
The pier deck, based on limited survey information, appears to be approximately 9 feet above Mean Low Water. The tidal range is approximately 4.4 feet Mean Low Water to Mean High Water.

Designation of Pier 102 as "condemned" in the 1997 *Governors Island Land Use Study*, prepared by the Beyer Blinder Belle Consortium, appears to be erroneous. Neither report author Beyer Blinder Belle nor nor report contributor Vollmer Associates could confirm the designation or specify why such designation would have been assigned.

At present, the fixed pier and main ferry boarding level has 3-1/2- to 7-1/2-foot differentials, which prevent accessible embarkation and debarkation. However, the pier is well suited for the installation of floating docks adjacent to the existing sides of the pier to accommodate passenger ferries. By installing floating docks and interconnecting articulating ramps, the pier could serve as the base for an accessible ferry terminal. The majority of the existing private operators in New York Harbor have vessels that could be accommodated on these floating docks and that have departure freeboard heights of between 4-1/2 and 5 feet on the sides of the vessels. By installing a floating dock with a 4-1/2- to 5-foot freeboard, the accessibility problem between the vessel and the deck of the floating dock could be solved.

Figure 21, below, shows how the floating dock could be attached to the seawall adjacent to the existing Pier 102. (The seawall attachment point is clearly visible in Figure 19, above.)

Figure 21
Rendering of possible Pier 102 floating-dock installation
Source: David Porter, Childs Engineering Corporation



The capacity of the new floating dock system with a single sided berth arrangement for passenger access would be substantial. Although there are a variety of different sized vessels in the New York Harbor area, a large number of 149-passenger vessels are currently in service. In general, even at near capacity, these vessels can easily discharge passengers in a 10- to 12-minute period. If a 20-minute headway is selected, and an average of 10 operating hours per day are available, this single berth could accommodate in excess of 3,000 visitors per day. Over one year, this equates to in excess of 1 million passengers being accommodated through this single floating dock system. If a

second accessible floating dock berth were positioned at the pier facility, this number would double and provide access to more than 2 million visitors per year.

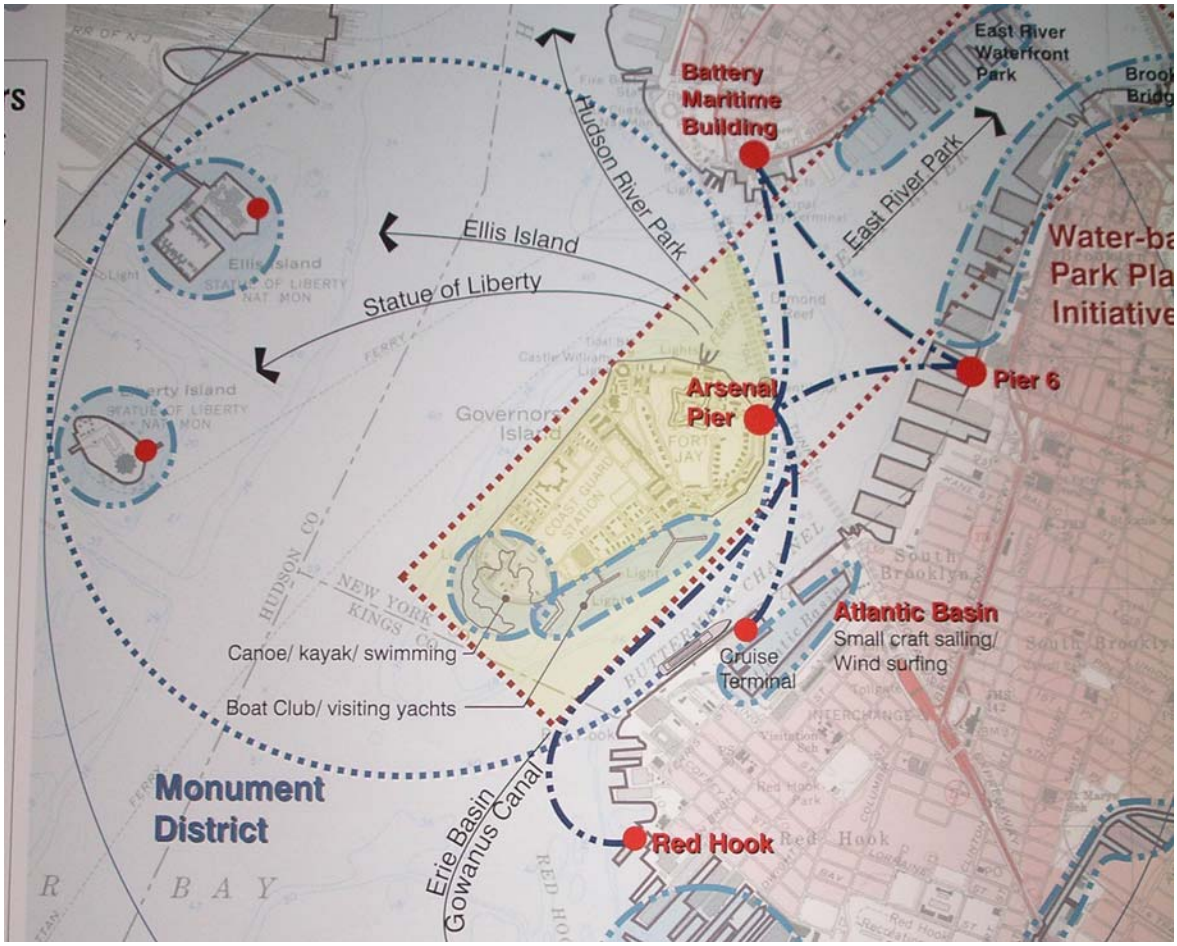
Beyond the possible installation of a floating dock, an additional accessibility issue remains—the grade leading from Pier 102 to Fort Jay (see Figures 16 and 17) has a slope greater than the 5 percent mandated by the Americans with Disabilities Act. This problem would also need to be overcome, either by re-engineering the approach from the pier to the fort or by providing an alternative means of access for those requiring mobility assistance.

In addition to accommodating the floating dock berth for passenger ferries, one face of the existing pier could be used for berthing small research vessels, which may provide the basis for a children's education program. Many facilities in the Northeast look to accommodated small research vessels at public facilities such that local school children can undertake field trips and learn about the marine sciences.

Pier 101 condition and upgrades

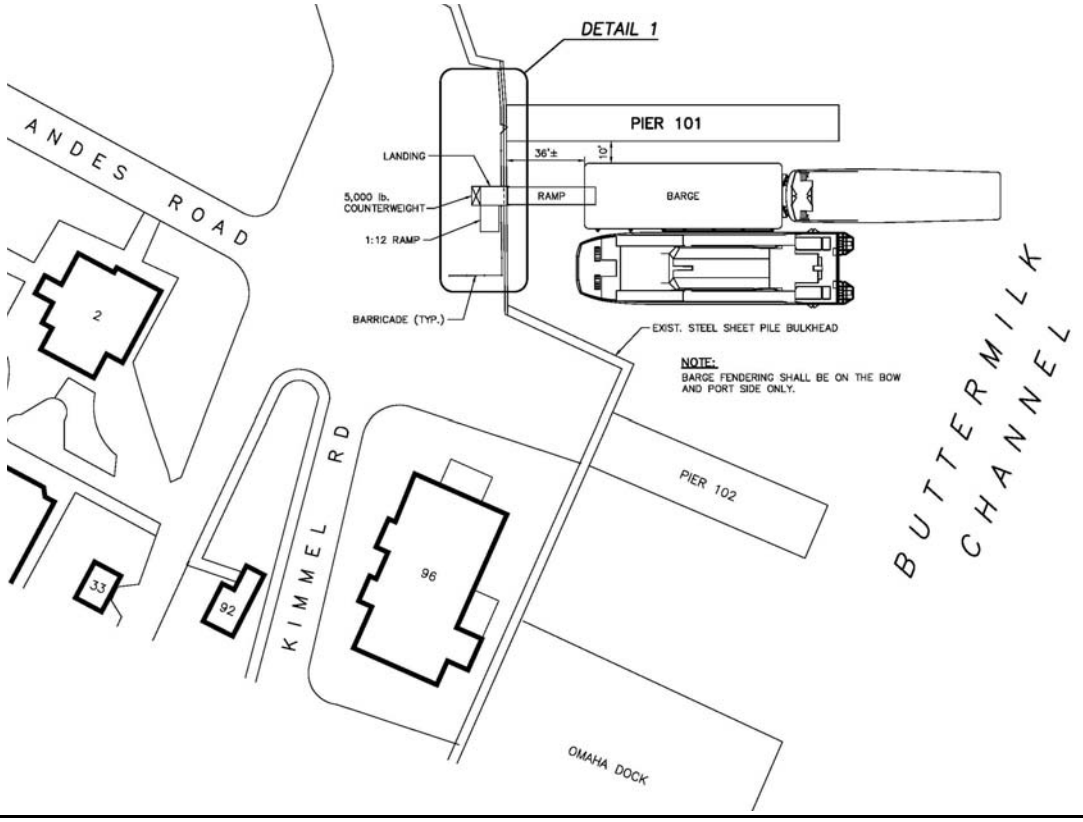
As part of its ongoing planning process, GIPEC is considering improvements to Pier 101, recognizing that the area around Piers 101 and 102 could be suitable as an entry point for island visitors. The graphic below was presented by GIPEC at a July 2004 public meeting on the island.

Figure 22
GIPEC concept of Pier 101/102 entry area
Source: GIPEC



GIPEC has begun examining the installation of a floating dock adjacent to Pier 101. If GIPEC decides to proceed with such plans, it will be important to coordinate with GOIS, as it may be difficult to effectively use floating docks with both Pier 101 and Pier 102—physical constraints indicate that only one installation would be feasible.

Figure 23
GIPEC rendering of possible Pier 101 floating dock (with boat), showing proximity to Pier 102
Source: GIPEC



With regard to the installation of any floating dock, whether at Pier 101 or Pier 102, it is likely that NPS would want a side-loading capability (as opposed to a bow-loading capability)—more vessels run by more operators have side-loading capabilities than bow-loading; also, the freeboard is not as high for side loading, meaning that boarding is easier, particularly for mobility-impaired passengers. It is important that any construction plans allow the appropriate physical dimensions for effective use of such an installation.

Other docks' condition

Of the docks administered by GIPEC, only Soissons Dock and Pier 101 are regularly in use. (Soissons is the only island facility capable of accommodating the *Coursen*.) GIPEC transportation consultants had reportedly been compiling detailed condition assessments of its docks as of the writing of this report. Such information may be made available to GOIS.

The 1997 *Governors Island Land Use Study* contained little detail on Soissons Dock. Yankee, Tango, and Lima Piers were reported to be "in good structural condition" but have since deteriorated, and would require substantial maintenance and/or improvements in order to be used. Omaha Dock is disintegrating and is no longer usable (see below).

Figure 24
Omaha Dock, view from Pier 102

Battery Maritime Building
The Battery Maritime Building (BMB) in Manhattan is currently the sole passenger ferry embarkation point for travel to Governors Island. Administered by GIPEC, it contains three slips (numbered 5, 6, and 7). The BMB is undergoing substantial renovation, and its future status has not yet been determined. Two or possibly all three slips could be made available for water transportation service to Governors Island.

Surface infrastructure conditions
The 1997 *Governors Island Land Use Study* indicated that "overall, the [island's] roads are in fair condition, but are more than thirty years old. If the roads are to be used, they will requiremajor repairs or reconstruction over the next ten years." Although most of the roads fall outside the GOIS boundary and so are administered by GIPEC, the nature of the GOIS/GIPEC relationship suggests that NPS will need to have some role in maintaining and/or improving the road system, particularly with regard to coordinating on-island transportation services. A more detailed assessment of road conditions is beyond the scope of this study, but may be needed as a separate effort.

Noteworthy trends in New York Harbor transportation planning; stakeholder initiatives and potential partnership opportunities

As a result of the recent successes of water transportation in New York Harbor, many stakeholders—including the City and State of New York, the U.S. Coast Guard, the National Park Service, the Metropolitan Transportation Authority, and New Jersey Transit—have expressed interest in maintaining a healthy and flexible water transportation system as part of an integrated regional transportation network. These organizations, along with private ferry operators, non-profit interest groups, and public planning agencies, are currently working both independently and

in concert to develop a framework for the future development of water transportation in New York Harbor. This framework aims to make possible the continued expansion and enhancement of ferry service in the New York area; it could offer significant partnership potential to Governors Island.

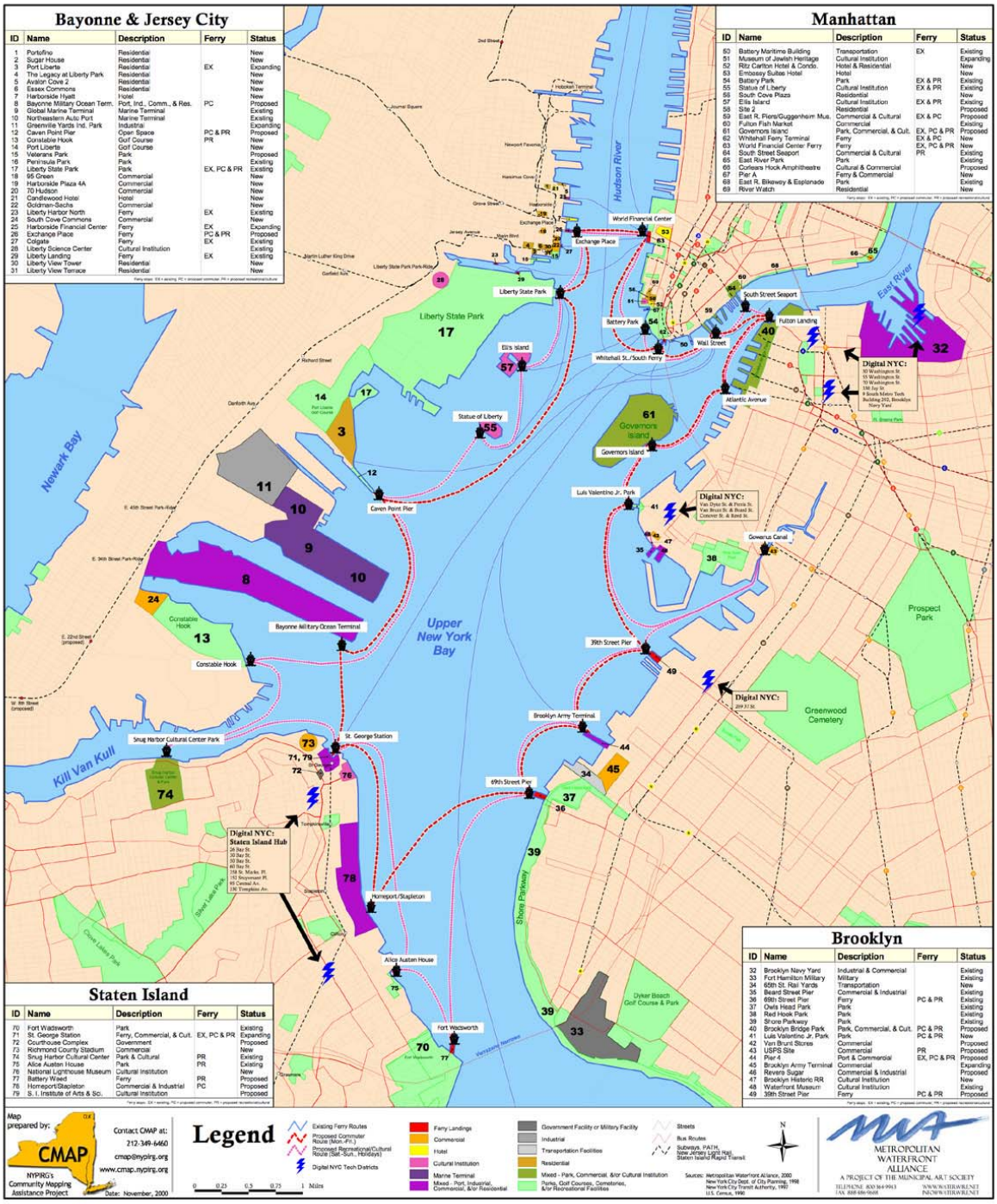
Planning efforts

- The Regional Plan Association, a non-profit organization serving the tri-state area, has called for a significant expansion of ferry service in the New York region as a component of the rebuilding of the Lower Manhattan transportation network. As part of its role in the Empire State Transportation Alliance, the Regional Plan Association has recommended constructing a new intermodal ferry terminal at the Battery Maritime Building, connecting the Long Island Rail Road to high-speed ferry service, relocating the World Financial Center ferry landing to be closer to the business centers of Lower Manhattan, and creating a harbor-wide network of ferry terminals.

- Gateway National Recreation Area has recently undertaken several significant planning projects designed to improve the water linkages between its major units. Among other efforts, Gateway is considering constructing or expanding docks and other facilities at Sandy Hook, Jamaica Bay, and Staten Island, in an effort to encourage visitors to travel to the recreational and cultural resources of Gateway by water. The proposals for Gateway also include the use of water transportation as a means of interpretation and as a means to visually connect the contemporary experience of water transportation to the historic story of New York Harbor as an industrial and transportation center.

- The Metropolitan Waterfront Alliance, a coalition of water-oriented organizations, is advocating the development of a master plan for all waterborne transportation in the New York region. Its master plan concept—called the Harbor Loop—would lay out a vision for a region-wide network of water transportation, one in which passengers are transported, and cultural and economic linkages provided, between the communities of New York Harbor.

Figure 25
Metropolitan Waterfront Alliance "Harbor Loop" proposal
Source: MWA; waterwire.net



- Plans have been in place since the late 1990s to introduce high-speed ferry service between Lower Manhattan and LaGuardia Airport. New York Waterway was chosen as the operator for this service in 1997, but the project long remained in the planning stages. These plans have been revived since 9/11; Circle Line may begin service in mid-2005. A similar service is envisioned for John F. Kennedy Airport.

- The Lower Manhattan Development Corporation, set up after 9/11 to coordinate the rebuilding of Lower Manhattan, released a "Transportation Strategies" document in April 2003 in which expanded ferry services were highlighted.

- The Governors Island Preservation and Education Corporation (GIPEC) is analyzing options for providing ferry service to Governors Island, and produced a preliminary report in October 2003 that provided a general overview of several alternatives.

New facilities and services

- The New York City Department of Transportation, as the primary municipal agency involved with water transportation in New York Harbor, has undertaken a significant renovation of the two terminals serving the Staten Island Ferry, St. George's Ferry Terminal on Staten Island and Whitehall Terminal in Lower Manhattan. These renovations will allow the terminals to accommodate additional passengers, while the improvements at the Whitehall Terminal will also provide for new links to public transit.

- The Port Authority of New York and New Jersey is currently constructing a new $40 million ferry terminal at the World Financial Center in Lower Manhattan. This terminal, when completed, will have five ferry slips and will be able to process 16,000 passengers per hour. The construction, which began in 2003, is scheduled to take two years to complete.

- In January 2003, New York Waterway undertook a $38 million reconstruction of its ferry terminal at West 38th Street in Manhattan.

- Ferry operators are introducing new vessels into service—including high-speed catamarans, one of which SeaStreak America launched in September 2003.

- The National Parks of New York Harbor recently began offering "Gateway to America" audio harbor tours in connection with the National Park Foundation and New York Water Taxi. These tours (priced at $20 for adults) provide a narration on the historical and cultural significance of New York Harbor and related resources. It is possible that such tours could be expanded to include landside narration.

New routes and services

- The growing demand for water transportation in the New York region has been met by ferry operators with both new routes and new services. Several new routes have been established in the period since 9/11, and additional routes are currently under consideration and review. Intended to serve both commuters and recreationalists, these new services could significantly expand the potential audience for water transportation in New York Harbor.

- In March of 2002, New York Governor George Pataki and New York Mayor Michael Bloomberg jointly announced the establishment of two new ferry routes in the New York-New Jersey region. The first of these routes, a free water shuttle to transport commuters between the World Financial Center in Lower Manhattan and Pier 11 on the East River, operates every 15 minutes during the morning and evening rush hours. The second of the new routes carries passengers between the Hoboken Rail Terminal and Pier 11, with service every six minutes during rush hour. Service on other, existing routes was increased at the same time.

- A new ferry service, the New York Water Taxi, was launched in September of 2002 to provide short-distance water transportation in New York Harbor. The Water Taxi serves passengers traveling between Brooklyn and Lower Manhattan, and will likely expand to

additional locations on the West Side of Manhattan. New commuter service from Red Hook, in Brooklyn, was announced in December 2003.

- New York Harbor has also seen a recent increase in ferry services intended for use by recreational or leisure passengers. An excursion service was introduced at Riis Landing in Brooklyn in 2001 and continued in 2002, with the service carrying approximately 2,000 passengers per year. In 2003, New York Waterway offered regular service during summer weekends between Riis Landing and Manhattan.

Governors Island visitation estimates

The only visitation estimates that exist for Governors Island—not just the national monument, but the entire island—were produced in 1999 by the Regional Plan Association (RPA). A figure of 229,333 was presented for annual visitation to GOIS, as against a total of 1.3 million visitors to the island as a whole, given moderate development assumptions for the GIPEC-administered portions of the island. These data are fully presented in Appendix C1.

It is strongly recommended (see Section 5 for more detail) that GOIS work to secure updated visitation estimates; notional visitation figures are essential in order to determine the financial feasibility of proposed transportation services. (Section 4 presents preliminary cost-analysis results that rely upon visitation figures.)

Other national park examples of water-transportation dependence

It is useful to compare Governors Island to similar examples of parks and recreation areas reachable by ferry; valuable lessons may be learned from their experiences. These examples, identified during initial research, will be further examined and expanded upon, as appropriate, as the planning process continues.

Eight other national park units rely on water transportation as the primary means of visitor access. These parks, as identified from the Washington Service Office's list of national parks with Alternative Transportation Systems, are:

- Apostle Islands National Lakeshore, Wisconsin.
- Statue of Liberty and Ellis Island National Monuments, New York.
- Fort Sumter National Monument, South Carolina.
- Fort Matanzas National Monument, Florida.
- Alcatraz Island (part of Golden Gate National Recreation Area), California.
- Boston Harbor Islands National Recreation Area, Massachusetts.
- Cumberland Island National Seashore, Georgia.
- Cape Lookout National Seashore, North Carolina.

A number of other national park units rely on a combination of water and air transportation as principal means of visitor access. These parks include:

- Channel Islands National Park, California.
- Glacier Bay National Park and Preserve, Alaska.
- Katmai National Park and Preserve, Alaska.
- Yukon-Charley Rivers National Preserve, Alaska.
- Isle Royal National Park, Michigan.
- Perry's Victory & International Peace Memorial, Ohio.

- Lake Chelan National Recreation Area (part of North Cascades National Park), Washington.
- San Juan Island National Historical Park, Washington.
- Dry Tortugas National Park, Florida.

(Still other national park units offer different kinds of water transportation services. Some, like Fort McHenry National Monument and Historic Shrine, in Maryland, are fully reachable by boat but also by other means. Others, like Fire Island National Seashore, in New York, and Gulf Islands National Seashore, in Florida and Mississippi, are mostly reachable by road, but feature areas—in the case of Fire Island, the Sailors Haven and Watch Hill units—that are reachable only by water transportation.)

Non-NPS examples

In addition to the national park examples cited above, an October 2003 GIPEC transportation report cited other examples that might be appropriate for GOIS to consider:

- Treasure Island, California. Like Governors Island a former military installation, the 754-acre Treasure Island has long been slated for recreational development (though there is now a significant civilian residential population that inhabits former military housing). Treasure Island is reachable by automobile and bus, but the development concept plan estimates that 90% of visitors to the island will arrive via ferries that will provide superior connections to downtown San Francisco and other Bay Area locations.

- Catalina Island, California. Air service, too, is available to this large (48,000-acre) island, which is a prime summer tourist destination. The 75-minute ferry trip is much longer than to Governors Island. Fares are significant; an adult one-way ticket is about $21.

- Bainbridge Island, Washington. The Seattle/Puget Sound area is one of the busiest ferry markets in the nation; 23 ferry trips are offered daily on the 35-minute run from Seattle to Bainbridge Island, which is a recreational and cultural draw, especially in the summer. The island promotes non-motorized transportation but does allow vehicles; the ferry charges a fare, with a surcharge for automobiles. Bainbridge Island residents—there are some 20,000—also use the ferry service.

Additional information

More information on similar NPS units—including visitation figures, GMP excerpts, and characteristics of other water transportation services—is located in Appendices B1 and B2.

Section 3: Transportation elements

This section uses an "element" approach to begin analyzing possible transportation services to Governors Island in line with the preliminary GMP alternatives currently under consideration. This method describes transportation options as if they were items on a menu.

As described earlier, creating a list of categorized transportation elements, analogous to the items on a restaurant menu, enabled the description and technical analysis of specific actions relative to transportation.

In the case of Governors Island, the following element categories were created for ferry transportation:

FO	Ferry origin and connections
FD	Ferry destination
BT	Boat type
SD	Visitor service schedule (day)
SY	Visitor service schedule (year)
F$	Fare
MA	Management arrangements
OIS	Off-island staging

Additional element categories were created for on-island transportation:

ST	Service type
VS	Vehicle size
I$	Fare
VOW	Vehicle(s) owner
VOP	Vehicle(s) operator

A final element category—OM—was created for other modes.

This section presents an overview description and analysis of all the elements developed for the categories above. For each element, the following evaluation criteria can be considered:

- Is the element incompatible with any other elements? Some elements are mutually exclusive—for instance, a boat cannot be owned by both NPS and a private operator. However, some elements are compatible with one another—a service can have multiple points of origin, for example. Some elements "go together"—for instance, ownership of an on-island transportation vehicle by a ground-transportation concessionaire contracted by GIPEC indicates operation of that vehicle by the same concessionaire. (In contrast, ownership of an on-island vehicle by GOIS does not necessarily mean that GOIS will also operate that vehicle.)
- How does the element contribute to improving the visitor experience? What can be said of likely visitor demand, acceptance, and/or enjoyment?
- How does the element contribute to protecting the park's natural and cultural resources?
- Does the element provide any other advantages to the park—such as enabling partnerships, or facilitating the creation of broader links throughout New York Harbor?
- Does the element contribute to the park's operational efficiency, reliability, and/or sustainability?
- What is the element's effect on public safety and security?
- What is the physical feasibility of implementing the element? What engineering or environmental documentation would be required?

- What is the procedural/managerial feasibility of implementing the element? How would the park relate to stakeholders; what is the likely stakeholder support? What private investment/stakeholder collaboration might be expected? Does the element lend itself to combining Governors Island transportation services with other recreational or commuter services?
- What is the financial feasibility of implementing the element? What park and stakeholder expenditures would be necessary?
- What are the short-term and long-term implications of implementing the element?
- What are this element's advantages and disadvantages compared to other elements in the same category?

Due to the large number of elements and the limited scope of this high-level study, a detailed technical analysis of each element was not undertaken, but such activity—in line with the framework established herein—could be appropriate as part of "Phase II" follow-on effort.

The transportation elements, in tabular form, are listed in full in Appendix D—read below and in Section 4, however, for essential guidance on effectively working with the elements.

Ferry transportation elements

Some cost analysis was undertaken in connection with water transportation; these appear in Section 4. More detailed cost analysis would be appropriate as part of a follow-on "Phase II" planning study, once a preferred GMP alternative is selected.

FO—ferry origin/connections
This category lists as elements possible points of origin for water transportation services to Governors Island.

FO1	Manhattan: BMB	Service originating from the Battery Maritime Building in Manhattan, as with the current GIPEC service. It is unlikely that the BMB could continue to be used as at present if GOIS opts not to make use of GIPEC service originating there, although GIPEC has said that ongoing renovations to the BMB may make possible the use of one slip for commercial purposes.
FO2	Manhattan: other piers/facilities (e.g., Pier A, USCG/MIO)	Service originating from other locations in Manhattan, including two possible locations in Battery Park: Pier A, which is being considered for redevelopment by several different agencies, and the United States Coast Guard Marine Inspection Office facility, which under previous National Parks of New York Harbor planning studies had been identified as a potential NPNH water transportation hub.
FO3	Brooklyn	Service originating from one or more locations in Brooklyn. Correlates with service being provided under one or more contracts, or by partners.
FO4	New Jersey	Service originating from one or more locations in New Jersey (such as Liberty State Park, from which service to the Statue of Liberty and Ellis Island is currently provided). Correlates with service being provided under one or more contracts, or by partners.

FO5	Statue/Ellis	Service connecting from the Statue of Liberty or Ellis Island. It is likely that because of post-9/11 security restrictions, in place for at least the foreseeable future, no passengers will be carried to Statue or Ellis without undergoing a security procedure that would require an infeasible physical presence at the point of ferry embarkation (on Governors Island). However, it is possible that passengers departing from Statue or Ellis could be transported to Governors Island, which has no such security limitation.
FO6	Gateway	Service connecting from the Riis Landing and/or Sandy Hook units of Gateway National Recreation Area.
FO7	Other origin/ connections	Service originating from or connecting to other locations not mentioned above.

FD—ferry destination

This category lists as elements possible destination points for water transportation services to Governors Island.

FD1	NPS-owned dock (Pier 102)	Service to Pier 102, the NPS-owned dock. In order to comply with ADA requirements, as discussed in Section 2, significant improvements would be needed to Pier 102 and to the surrounding area (to remove a greater than 5% grade up from Pier 102 to Fort Jay). This element correlates with GOIS-operated or GOIS-contracted transportation services, and with boats serving up to 149 passengers.
FD2	GIPEC (Soissons) dock	Service to the GIPEC-owned Soissons dock, currently in use. It is likely that such service could be provided only through arrangement with GIPEC or its transportation contractors. Correlates with large-boat service.
FD3	Lima/Tango/ Yankee piers	Service to the GIPEC-administered docks on the east side of the island. Depending on the particular dock, and on the renovations that would be needed (as discussed in Section 2), could correlate to multiple boat types, but services would be arranged through GIPEC or its transportation contractors.
FD4	Other dock, on NPS land	A new dock constructed on an NPS-owned portion of the seawall. (Unlikely to happen.)
FD5	Other dock, not on NPS land	A new dock constructed on a GIPEC-owned portion of the seawall. GIPEC has been discussing constructing one or more new docks, either as replacements for or supplements to Soissons or the other docks. A new dock—particularly in the south—could also be used mainly for construction and vehicle access during GIPEC's island build-out, with combination vehicle/special-event passenger service thereafter. Probably correlates to large boats.

BT—boat type

This category lists as elements possible boat types that could be used for water transportation services to Governors Island.

BT1	Very large (Statue of Liberty/Staten Island Ferry)	These very large boats are operated only by the Staten Island Ferry and by the Circle Line, current Statue/Ellis concessioner. Unlikely to be necessary for Governors Island—at least for some years—except, perhaps, for special events, such as concerts or performances organized by GIPEC or partners. No docks, at present, can serve such vessels, although a new GIPEC dock might be able to (see FD5, above).
BT2	Large (150+ passengers)	The *Coursen* fits this category (as does its sister ship). Both vehicle and passenger access is possible. Correlates with Soissons Dock and possibly with Lima, Tango, and Yankee piers, depending on their reconstruction. Probably does not correlate with Pier 102.
BT3	Small (<149 passengers)	The type of boat most commonly operated by private companies in New York Harbor. Correlates with NPS-contracted service from Manhattan (and other points) to Pier 102, but could also be possible under arrangement with GIPEC.
BT4	Small, with interpretive service	The same boat type as in BT3 but with interpretive services provided—a quieter, more customized ride, with interpretation by a GOIS ranger or partner. May be appropriate for educational groups, charters, and special events, but may not be feasible for the general public, especially during peak season—interpretive services are difficult to provide on the water, owing to the noise and, in the case of Governors Island, the short ride.
BT5	Private motorboats, sailboats, kayaks, other craft	Although Governors Island is not currently subject to the same security restrictions as at Statue/Ellis, it is unlikely that GOIS would be able to provide access via private craft—although GIPEC's development plans for its portion of the island could include a marina.

SD—visitor service schedule (day)

This category lists as elements possible day service schedules that could be appropriate for water transportation services to Governors Island.

SD1	Full 24-hour service	Similar to the Staten Island ferry, a scheduled 24-hour operation. Unlikely except in the long term, assuming full build-out by GIPEC—and even then could be unlikely.
SD2	Limited 24-hour service	Daytime service generally, with 24-hour service on special occasions (holidays, performances or other special events, etc.).
SD3	Full daytime service	Full daytime service, as with the current passenger operation.
SD4	Full peak service; limited off-peak service	Full daytime service, but limited during off-peak hours. If GIPEC continues to be the primary transportation provider and Governors Island is developed as a business destination, this schedule is conceivable—but unlikely, especially as this configuration would cost about the same as full daytime service.

SY—visitor service schedule (year)
This category lists as elements possible year (calendar) service schedules that could be appropriate for water transportation services to Governors Island.

SY1	Year-round service, possibly with additional service during peak season	Full year-round service.
SY2	Peak-season service only, plus special events/charters	Essentially the current arrangement, although with additional service (probably for very large or very select groups) on special occasions, such as performances, concerts, or festivals.
SY3	Peak-season service only	Essentially the current arrangement. Could be the minimum acceptable level of service considered "public access" to the park.

F$—fare
This category lists as elements possible fares for water transportation services to Governors Island.

F$1	No fare charged	If GOIS contracts its own service, this option is infeasible. It may be a possibility only if GIPEC, as a condition of its development plans, requires developers or other partners to subsidize water transportation (and makes such transportation available to park visitors). Unlikely in any case, given that current ATP eligibility criteria disallow payment of operating expenses for transit, and GOIS's operating budget is probably not an appropriate funding source.
F$2	Fare charged	Fares could be collected by, and receipts could go to, a GOIS water-transportation concessionaire or to GIPEC or its concessionaires. Fare levels would need to be set appropriately for GOIS visitors, especially if GOIS visitors are to use services provided by GIPEC for both GOIS visitors and GIPEC visitors; a cost analysis would be needed (see discussion below and in Section 4). GOIS may want lower fares for children, retirees, or other classes of visitors, or for special events.

MA—management arrangements
This category lists as elements possible management arrangements for water transportation services to Governors Island.

MA1	GOIS owns (or leases) dock and operates its own service	Probably impractical, given that current ATP eligibility criteria disallow payment of operating expenses for transit, and GOIS's operating budget is probably not an appropriate funding source. Although fare receipts could be used to cover (or at least offset) operating costs, GOIS would need to obtain permission to charge a fare (which could be perceived as an "entrance fee"). Also, GOIS currently lacks the administrative and personnel structure necessary to enable this option.

MA2	GOIS owns (or leases) dock and contracts with a single operator	A common "traditional" arrangement among other island national parks (as detailed in the report appendices). This would be a way to guarantee, via contract mechanism, public access to Governors Island. Section 4 presents a brief cost analysis of a transportation alternative including this element. Also, may be the necessary scenario if private investment is sought to improve Pier 102.
MA3	GOIS owns (or leases) dock and contracts with multiple operators	Potentially more flexibility than MA2, if GOIS is able to enter into relationships with complementary operators—but requires more logistical coordination. May complicate private investment in Pier 102.
MA4	GOIS owns (or leases) dock and issues incidental-use permits to multiple operators (including charters), but has no contracts	Greater flexibility than MA2 or MA3, but this element in itself does not allow for a guarantee of public access to the island. Would have to be done in conjunction with some guaranteed transportation service.
MA5	GOIS owns (or leases) dock that is available for public use	It is unlikely that Pier 102 (or any NPS-owned or -leased) dock could be made available for public, non-permitted use, given constraints of security, space, and safety, and the need to provide some form of guaranteed public access.
MA6	GOIS does not own or lease dock (or doesn't use dock that it owns); agreement with partner (GIPEC, operator) for dock on NPS land	Similar to the current arrangement, but assumes that GIPEC (or another operator or partner) takes control of Pier 102 or another NPS-owned dock. If, for instance, GIPEC wished to continue providing transportation service but decided that Pier 102 would be a better island destination than Soissons, GOIS could reach an agreement to allow GIPEC access, possibly as one provision of a transportation partnership agreement. The Governors Island deed and title restrictions, which stipulate how GOIS and GIPEC have access to each other's facilities, would figure prominently in any implemention of this scenario.

MA7	GOIS does not own or lease dock (or doesn't use dock that it owns); depends on services provided beyond its control (e.g., GIPEC)	The current arrangement. Although GOIS would not necessarily be directly involved with the finances (passengers could pay a fare directly to GIPEC or its transportation operator), GOIS does have an interest in knowing what the costs are of operating passenger service to the island, so that in any agreement with GIPEC to provide such service, GOIS visitors pay an appropriate fare. (If park visitors make up only a percentage of overall passenger traffic to the island, for instance, park-visitor fare receipts should be in proportion to that percentage, with individual fares set accordingly.) Although brief cost analyses are presented later in this section (with regard to the cost of providing vehicle service to the island) and in Section 4 (with regard to the cost of GOIS-contracted passenger service), no analysis of *Coursen* passenger operating costs has yet been undertaken—but would be appropriate as part of a detailed follow-on transportation plan.

OIS—off-island staging

This category lists as elements possible off-island staging arrangements for water transportation services to Governors Island.

OIS1	NPS-owned facility, dedicated to GOIS	This is unlikely. May be possible, if at all, only in the long term, owing to the expense involved. (NPNH may first focus on improved off-island facilities for Statue/Ellis, given the higher visitation, security concerns, and potential for private investment.)
OIS2	NPS-owned facility, shared between NPNH	Pier A, in Battery Park, has long been discussed as a central transportation hub for the National Parks of New York Harbor—that location, or another, may be one way to implement a shared NPNH facility, with boats departing for multiple NPNH destinations.
OIS3	NPS-owned facility, shared between NPNH and other non-NPS partners	Similar to OIS2 above, but with the participation of stakeholder partners, such as educational or cultural groups.
OIS4	NPS-leased facility	One example of this would be if NPS (or GOIS itself) leased passenger space and facilities, dedicated to park visitors, in a renovated Battery Maritime Building.
OIS5	Non-NPS-controlled facility; partnership arrangement	The current arrangement; GOIS has an agreement with GIPEC to permit park-bound passengers access to the Battery Maritime Building waiting room and staging area.

OIS6	Non-NPS-controlled facility; no express partnership (public or private)	If a GOIS water-transportation concessionaire operates from New York City-owned docks in Manhattan or Brooklyn, park-bound passengers would have access to those non-NPS-controlled facilities. In practice, may be essentially the same as OIS5, since a ferry-service contract could be considered a "partnership agreement."
OIS7	No specific facilities (e.g., public streets/ parks)	Staging in public areas; at present, GOIS passengers can wait within the BMB or on the adjacent public street. (Similarly, Statue/Ellis passengers currently queue in Battery Park prior to undergoing security screening.)

On-island transportation elements

Due to the constraints imposed by this effort, cost analysis of on-island transportation elements was not undertaken as part of this report; such activity would be appropriate as part of a follow-on "Phase II" planning study, once a preferred GMP alternative is selected.

ST—service type
This category lists as elements possible on-island transportation services.

ST1	Limited/ emergency service	The current arrangement; correlates with small, GOIS-staff-operated vehicles, as at present. The minimum necessary on-island transportation, in order to ensure some emergency capability; mobility is offered only to visitors who experience medical difficulties or who may need assistance negotiating the steep grades up from some of the docks. No fare is associated.
ST2	Limited service to National Monument facilities; special events	Could be similar to the service provided at Alcatraz Island (part of Golden Gate National Recreation Area); a greater capability to provide assistance to mobility-impaired passengers, on a semi-scheduled or semi-regular basis. One possible implementation could be a shuttle service between Castle Williams, Fort Jay, and Soissons Dock or Pier 102; such a service would be aimed at visitors requiring assistance, as opposed to general visitation. Probably impractical to assess a fare for such service. GIPEC cooperation would not necessarily be crucial. (This element is additive—it also includes the features in ST1.)
ST3	Regular service throughout historic district	More regular/scheduled service throughout the entire historic landmark district. Correlates with higher demand and a larger vehicle, as well as some sort of fare—I$2 or I$3, below. Also implies professional (and probably contractor) operation. GIPEC cooperation begins to emerge as more important but still may not be crucial at this stage. (This element is additive—it also includes the features in ST2.)

ST4	Regular service throughout the island	Regular/scheduled service throughout the entire island. Implies high demand, a large vehicle, a fare, and strong cooperation with GIPEC, and visitor dependence on the service in order to fully realize their island experience. Island infrastructure may require upgrades. (This element is additive—it also includes the features in ST3.)
ST5	Guided vehicle tours	Smaller, interpretive tours, correlating with a smaller vehicle. May not need to be operated by GOIS staff but a ranger presence could be essential to the success of any interpretation. One model is the service Shenandoah National Park provides to Rapidan Camp—limited, scheduled interpretive service by a Shenandoah ranger.

VS—vehicle size

This category lists as elements possible vehicle types that could be used for on-island transportation services.

VS1	Golf cart/Th!nk vehicle	The current arrangement. Electric-powered, very small vehicle. Unless a fleet of such vehicles is contemplated, operation—on a strictly limited/emergency/service basis—would probably be by GOIS (or, possibly, GIPEC staff).
VS2	Small jitney/van (<15 passengers)	A smaller (possibly "themed") vehicle might be more appropriate for service within the national monument or historic landmark district. Implies relatively low demand for on-island transportation, and a relatively small need for an upgraded, transit-compatible island infrastructure. Could be used for small group tours. May be able to be operated without special licensing—e.g., by GOIS rangers—if fewer than 15 passengers are carried. Could be conventionally or alternatively fueled (depending on alternative fuel availability and infrastructure).
VS3	Bus (15-40 passengers)	This kind of vehicle may be more appropriate for whole-island service. Higher cost could be offset by greater demand. Would require trained operators, implying operation by a GOIS or GIPEC contractor (or by a partner). May be restricted to larger roads in better condition; pavement upgrades and bus-passenger amenities (such as roadside shelters, benches, and signage) are indicated. Could be conventionally or alternatively fueled (depending on alternative fuel availability and infrastructure). Noise could emerge as a significant concern.
VS4	Open-air tram	Such vehicles are in use at locations including Alcatraz (see Figure 26, below). However, if year-round use is contemplated, this type of vehicle may not be appropriate. Also, the road geometry of Governors Island may be a concern; a tram could be too long or too underpowered to travel on particular roads. Could be conventionally or alternatively fueled (depending on alternative fuel availability and infrastructure).

Figure 26
Tram used at Alcatraz
Source: NPS

I$—fare
This category lists as elements possible fares for on-island transportation services.

I$1	No fare charged	Appropriate if only limited/emergency service is to be provided, but otherwise possible only if subsidized by GOIS (which could be impractical, given funding constraints), GIPEC, or an on-island partner.
I$2	Fare charged; included in fare for water transportation	Correlates with on-island transportation services being provided by the water-transportation operator (see VOW, VOP categories below).
I$3	Fare charged separately	Probably the only option if ground transportation is to be provided by a separate (GOIS or GIPEC) contractor. However, could also be appropriate under other circumstances—if only limited on-island transportation is provided, and then mostly as a convenience as opposed to an accessibility solution, it could be perceived as an optional add-on, rather than a necessity. In such a case, many visitors might not wish to pay extra for on-island transportation. The feasibility of this option depends strongly on which GMP alternative is ultimately selected—whether or not GOIS visitors are to have their experience focused on the national monument or on the whole island. A whole-island focus increases the need for "bundled" ground transportation for which no additional fare collection would be necessary—and, therefore, reduces the feasibility of having a separate contractor provide on-island transportation services.

VOW—vehicle(s) owner
This category lists as elements possible owners of vehicles used to provide on-island transportation services.

VOW 1	GOIS	Alternative Transportation Program funds may, under current eligibility criteria, be used to purchase transit vehicles. GOIS could also seek funding from other NPS or federal programs. Even if the owner, GOIS would not necessarily have to operate transit vehicles; it is possible that ownership could be transferred to a contractor or partner, or a leasing arrangement may be feasible. Correlates with all elements in the VOP category (below), all elements in the ST category (above), and all elements in the VS category (above).
VOW 2	GOIS water-transportation concessionaire	Indicates that a water operator has offered a comprehensive transportation service; if a water-transportation concessionaire owns an on-island vehicle, they would also operate it. In the VOP category, correlates exclusively with VOP2.
VOW 3	GOIS ground-transportation concessionaire (separate contract)	Indicates that on-island vehicle ownership (and, hence, operation) is by a separate contractor than for water transportation—in the VOP category, correlates exclusively with VOP3.
VOW 4	GIPEC	If GIPEC owns an on-island transportation vehicle (or vehicles), correlates most strongly with VOP4, VOP5, VOP6, and, possibly, VOP7 (if the GOIS partner is also a GIPEC partner).
VOW 5	GIPEC water-transportation concessionaire	Probably correlates exclusively with VOP5—the GIPEC water-transportation concessionaire, if owner of on-island transportation vehicles, would probably operate them.
VOW 6	GIPEC ground-transportation concessionaire (separate contract)	Probably correlates exclusively with VOP6—a GIPEC surface-transportation concessionaire, if owner of on-island transportation vehicles, would probably operate them.
VOW 7	GOIS partner	May correlate with all elements in the VOP category.

VOP—vehicle(s) operator

This category lists as elements possible operators of vehicles used to provide on-island transportation services.

VOP 1	GOIS	Since ATP funds cannot presently be used for transit operations, and given the constrained nature of the GOIS operating budget, this option is unlikely for comprehensive service, but does correlate with the provision of limited/emergency service using small vehicles.

VOP 2	GOIS water-transportation concessionaire	Could be possible whether the concessionaire or GOIS owns the vehicle. Such operation, if determined to be unprofitable or if GOIS wanted no separate fare charged, could be a logical adjunct to the water transportation franchise. (This option assumes that there *is* a water transportation operator providing service to Governors Island under contract to GOIS.) May not correlate with extensive service throughout the entire island.
VOP 3	GOIS ground-transportation concessionaire (separate contract)	Could be possible whether the concessionaire or GOIS owns the vehicle. May be more logistically complicated, both because multiple concessionaires (water and ground transportation) would be involved and because it would not be possible, as with VOW2, to operate ground transportation as a (possibly loss-making) adjunct to water transportation. A separate fare would need to be charged in order to attract interest from possible operators. May not correlate with extensive service throughout the entire island.
VOP 4	GIPEC	Could be possible whether GIPEC or GOIS owns the vehicle. Unlikely, however, as GIPEC would probably seek to arrange such operation via a contract of its own. Implies service throughout the entire island (or at least through the historic district), with GIPEC/GOIS cooperation.
VOP 5	GIPEC water-transportation concessionaire	Could be possible if GIPEC or the contractor owns the vehicle, but may be more difficult if GOIS owns the vehicle—there could be too many layers of administration. If GIPEC is providing water transportation, however, this could be a logical adjunct to the water transportation franchise (as with VOW2). Implies service throughout the entire island (or at least through the historic district), with GIPEC/GOIS cooperation.
VOP 6	GIPEC ground-transportation concessionaire (separate contract)	As with VOW5, a GOIS-owned vehicle may be impractical here (though still possible); otherwise, similar to VOW3. Implies service throughout the entire island (or at least through the historic district), with GIPEC/GOIS cooperation.
VOP 7	GOIS partner	GOIS could own the vehicle if an appropriate partner—an educational or nonprofit organization, perhaps tied in with on-island developmental or programming activities—operated it. Depends on the outcome of the GMP process and the willingness of partners to take an active role on the island.

"Other modes" transportation elements

OM—other modes
This category lists as elements possible other means of transportation to Governors Island. Although feasible only in the long term (if then), these ideas are part of the comprehensive transportation picture and a full analysis of possibilities properly includes them.

OM1	Subway	Possible extension of the New York subway system to Governors Island. Although this would be an extremely costly, long-term idea, there is a precedent at Roosevelt Island for such an extension.
OM2	Vehicular bridge	Probably infeasible.
OM3	Pedestrian bridge	Probably infeasible, even from the Brooklyn/Buttermilk Channel side.
OM4	Access to Brooklyn-Battery Tunnel	Probably infeasible, given the engineering (and possibly security) complexities that would be involved, but the tunnel does pass close beneath the island.
OM5	Aerial tram	The idea of an aerial tram or gondola is being explored by GIPEC, which is looking to European examples. Apparently, the distances and geometry involved are not beyond the realm of possibility, although significant hurdles—permitting, construction, viewshed, reliability/backup—would need to be overcome.
OM6	Helicopter	Could be a feasible means of transporting dignitaries, delivering emergency police or supplies, or conducting emergency medical or police evacuations.

For clarity, the OM elements category is *not* included in the full alternative tables shown in Appendix D.

How to read the elements charts

Table 27, below, shows how all of the *ferry transportation element categories* can be combined, each category in a column. *Do not read across*—there is no correlation across. The category columns are simply displayed next to one another so that they can be shown in a single, unified format.

Figure 27
Governors Island transportation elements matrix: ferry transportation *(table shows ferry elements only)*

	FO	FD	BT	SD	SY	F$	MA	OIS
	Ferry origin/ connections	**Ferry destination**	**Boat type**	**Visitor service schedule (day)**	**Visitor service schedule (year)**	**Fare**	**Management arrangements**	**Off-island staging**
1	Manhattan: BMB	NPS-owned dock (100/102)	Very large (Statue of Liberty/Staten Island Ferry)	Full 24-hour service (like Staten Island Ferry)	Year-round service, with additional service during peak season	No fare charged	GOIS owns (or leases) dock and operates its own service	NPS-owned facility, dedicated to GOIS
2	Manhattan: other piers/facilities (e.g., Pier A, USCG/MIO)	GIPEC dock (currently in use)	Large (150+ passengers)	Limited 24-hour service (off-hours service not scheduled, possibly only for emergency use)	Peak-season service only, plus special events/charters	Fare charged	GOIS owns (or leases) dock and contracts with a single operator	NPS-owned facility, shared between NPNH
3	Brooklyn	Lima/Tango/Yankee piers	Small (<149 passengers)	Full daytime service	Peak-season service only		GOIS owns (or leases) dock and contracts with multiple operators	NPS-owned facility, shared between NPNH and other non-NPS partners
4	New Jersey	Other dock, on NPS land	Small, with interpretive service	Full peak service; limited off-peak service			GOIS owns (or leases) dock and issues incidental-use permits to multiple operators (including charters), but has no contracts	NPS-leased facility
5	Statue/Ellis	Other dock, not on NPS land	Private motorboats, sailboats, kayaks, other craft				GOIS owns (or leases) dock that is available for public use	Non-NPS-controlled facility; partnership arrangement
6	Gateway						GOIS does not own or lease dock (or doesn't use dock that it owns); agreement with partner (GIPEC, operator) for dock on NPS land	Non-NPS-controlled facility; no express partnership (public or private)
7	Other origin/connections						GOIS does not own or lease dock (or doesn't use dock that it owns); depends on services provided beyond its control (e.g., GIPEC)	No specific facilities (e.g., public streets/parks)

The *other modes element category* and *on-island transportation element categories* combine to form their own tables. All of the tables are shown in full in Appendix D.

Section 4 explains how these elements can be combined to create transportation alternatives.

Note on vehicle access to Governors Island

Except for an overview analysis of on-island passenger transportation options, this study does not address the broader topic of vehicle access to Governors Island, as it is beyond the study scope. However, whether as part of a follow-on "Phase II" transportation planning effort or simply as part of park operations planning, the issue of vehicle access is a crucial one, for it involves:

- Visitor transportation on the island—including the delivery of visitor-transportation vehicles
- Deliveries (mail, NPS supplies, food or beverage concession items, etc.)
- Trash removal
- Equipment transfer/delivery
- Construction/maintenance

- Emergencies (including medical/security emergencies that may require the transfer of police, firefighting, medical, and/or related support equipment)
- "Other" (special events, dignitaries, etc.)

Section 4 briefly discusses the implications on GOIS transportation planning of the current unavailability of Pier 102—but, even if Pier 102 were to enter passenger service, it would not be able to permit vehicle access; that would remain the exclusive province of GIPEC. Currently, the *Coursen* is the only means of vehicle access to the island; it and its sister ship (along with the Staten Island Ferry boats), are the only vessels capable of transporting vehicles to the island. This has serious implications for GOIS; for the foreseeable future, GIPEC must be relied upon for such services.

GOIS has an interest in knowing what the costs are of operating vehicle service to the island, so that in any agreement with GIPEC to provide such service, GOIS does not bear more than its due share of the financial and logistical burden. Indeed, because GIPEC may consider the construction or conversion of points of origin instead of or in addition to the Battery Maritime Building—as well as the construction of docks on Governors Island instead of or in addition to Soissons—there may be significant capital expense associated with the continuing provision of vehicle service. An additional factor is that at present, given the in-progress nature of both the GOIS and GIPEC planning processes, the requirements for vehicle access to the island (in terms of capacity, number of trips needed, feasible schedule, etc.) are not well understood.

Figure 29
Estimated *Coursen* operating costs
Source: Volpe Center

Cost Element	Battery Park-Govs. Isl. 2 Round Trips every weekday, peak season weekends	Battery Park-Govs. Isl. 4 Round Trips every weekday, peak season weekends
Total Round Trips	626	1252
Total Operating Hours	910	910
Boat(s)	1	1
Crew (per boat)	4	4
Consumables (fuel, lubricant)	$9,739	$19,478
Labor, boat crews	$94,260	$94,260
Allocated Vessel maintenance	$13,964	$16,903
Allocated insurance	$6,250	$6,250
Allocated debt service	$0	$0
TOTAL OPERATING COST	**$124,213**	**$136,891**

Figure 29, above, estimates the cost of continuing *Coursen* service to Governors Island.[*] Because the demand for vehicle access is unknown, two scenarios are modeled—one assuming four trips per day year-round (except for off-peak weekends), and one assuming two trips per day year-round (except for off-peak weekends). The *Coursen* was assumed to have no debt-service cost (which, if another boat were acquired, could add a substantial financial burden); lacking detailed specifications, general estimates were used for the boat's length, breadth, depth, engine horsepower, and insurance/replacement value.

Although the boat itself has short operating hours because the trip—here assumed to be from Battery Park to Soissons Dock—is very short, the crew is assumed to be in pay status four hours per day when the boat operates. Labor is the primary cost driver for this service, since there is no debt service. Labor only, using moderate assumptions for the crew complement and wages, would cost an estimated $123,160 to run, with no projected revenues (on the assumption that only service vehicles owned or contracted by GIPEC and/or GOIS would be carried, and would pay no fare for the crossings; if the *Coursen* were to remain in combination passenger and vehicle service, crew labor costs would increase but could be offset by a revenue stream from passenger fares). The hours in pay status by the master and crew labor are necessarily higher than the calculated operating times for the ferry. Their pay is assumed to be structured in two-hour increments, starting with a minimum of four hours.

Other choices for point of origin (such as a putative Brooklyn point of origin), destination (such as the southern tip of Governors Island), and service frequency significantly increase operating costs.

It may be possible to obtain actual cost information from GIPEC against which the above estimates can be compared.

Bicycle access

One related topic is bicycle operation on Governors Island. This should be addressed, if GOIS wishes to explore the idea, as part of a detailed transportation plan, so as to account for bicycle staging off-island, bicycle accommodations aboard boats, bicycle infrastructure and facilities on the island itself, and potential effects on island circulation patterns.

[*] The cost analysis makes use of a Volpe Center model developed to analyze ferry systems economics; formulation of the underlying cost calculations was originally the result of extensive discussions with operators and work with transportation systems economists. The cost model has been updated and tailored for this analysis.

Section 4: Transportation alternatives

This section assembles the transportation elements described above into several possible transportation alternatives that correspond to the preliminary General Management Plan alternatives currently under consideration. The transportation alternatives represent scenarios that, fully developed as part of a follow-on planning effort, could be considered for implementation in connection with implementation of the preferred GMP alternative.

If the transportation elements, as described in Section 3, are analogous to items on a restaurant menu, then the transportation alternatives, described in this section, are combinations of those items—distinct "meals."

Creating transportation alternatives from the transportation elements

Figure 27 (shown in Section 3, and below) presents a summary table of all the ferry transportation element categories. *Do not read across*—there is no correlation across. The category columns are simply displayed next to one another so that they can be shown in a single, unified format.

Figure 27 (duplicate)
Governors Island transportation elements matrix: ferry transportation *(table shows ferry elements only)*

	FO	FD	BT	SD	SY	F$	MA	OIS
	Ferry origin/ connections	**Ferry destination**	**Boat type**	**Visitor service schedule (day)**	**Visitor service schedule (year)**	**Fare**	**Management arrangements**	**Off-island staging**
1	Manhattan: BMB	NPS-owned dock (100/102)	Very large (Statue of Liberty/Staten Island Ferry)	Full 24-hour service (like Staten Island Ferry)	Year-round service, with additional service during peak season	No fare charged	GOIS owns (or leases) dock and operates its own service	NPS-owned facility, dedicated to GOIS
2	Manhattan: other piers/facilities (e.g., Pier A, USCG/MIO)	GIPEC dock (currently in use)	Large (150+ passengers)	Limited 24-hour service (off-hours service not scheduled, possibly only for emergency use)	Peak-season service only, plus special events/charters	Fare charged	GOIS owns (or leases) dock and contracts with a single operator	NPS-owned facility, shared between NPNH
3	Brooklyn	Lima/Tango/Yankee piers	Small (<149 passengers)	Full daytime service	Peak-season service only		GOIS owns (or leases) dock and contracts with multiple operators	NPS-owned facility, shared between NPNH and other non-NPS partners
4	New Jersey	Other dock, on NPS land	Small, with interpretive service	Full peak service; limited off-peak service			GOIS owns (or leases) dock and issues incidental-use permits to multiple operators (including charters), but has no contracts	NPS-leased facility
5	Statue/Ellis	Other dock, not on NPS land	Private motorboats, sailboats, kayaks, other craft				GOIS owns (or leases) dock that is available for public use	Non-NPS-controlled facility; partnership arrangement
6	Gateway						GOIS does not own or lease dock (or doesn't use dock that it owns); agreement with partner (GIPEC, operator) for dock on NPS land	Non-NPS-controlled facility; no express partnership (public or private)
7	Other origin/connections						GOIS does not own or lease dock (or doesn't use dock that it owns); depends on services provided beyond its control (e.g., GIPEC)	No specific facilities (e.g., public streets/parks)

Figure 29 below shows how an example transportation alternative—the summer service currently provided to Governors Island by GIPEC—can be illustrated using this tabular form. The transportation elements that apply to this alternative are highlighted in green.

Figure 29
Example transportation alternative: current summer service *(table shows ferry elements only)*

	FO	FD	BT	SD	SY	F$	MA	OIS
	Ferry origin/ connections	**Ferry destination**	**Boat type**	**Visitor service schedule (day)**	**Visitor service schedule (year)**	**Fare**	**Management arrangements**	**Off-island staging**
1	Manhattan: BMB	NPS-owned dock (100/102)	Very large (Statue of Liberty/Staten Island Ferry)	Full 24-hour service (like Staten Island Ferry)	Year-round service, with additional service during peak season	No fare charged	GOIS owns (or leases) dock and operates its own service	NPS-owned facility, dedicated to GOIS
2	Manhattan: other piers/facilities (e.g., Pier A, USCG/MIO)	GIPEC dock (currently in use)	Large (150+ passengers)	Limited 24-hour service (off-hours service not scheduled, possibly only for emergency use)	Peak-season service only, plus special events/charters	Fare charged	GOIS owns (or leases) dock and contracts with a single operator	NPS-owned facility, shared between NPNH
3	Brooklyn	Lima/Tango/Yankee piers	Small (<149 passengers)	Full daytime service	Peak-season service only		GOIS owns (or leases) dock and contracts with multiple operators	NPS-owned facility, shared between NPNH and other non-NPS partners
4	New Jersey	Other dock, on NPS land	Small, with interpretive service	Full peak service; limited off-peak service			GOIS owns (or leases) dock and issues incidental-use permits to multiple operators (including charters), but has no contracts	NPS-leased facility
5	Statue/Ellis	Other dock, not on NPS land	Private motorboats, sailboats, kayaks, other craft				GOIS owns (or leases) dock that is available for public use	Non-NPS-controlled facility; partnership arrangement
6	Gateway						GOIS does not own or lease dock (or doesn't use dock that it owns); agreement with partner (GIPEC, operator) for dock on NPS land	Non-NPS-controlled facility; no express partnership (public or private)
7	Other origin/connections						GOIS does not own or lease dock (or doesn't use dock that it owns); depends on services provided beyond its control (e.g., GIPEC)	No specific facilities (e.g., public streets/parks)

In textual form, this service originates at the Battery Maritime Building (**FO1**), serves the GIPEC dock (**FD2**) using the *Coursen,* a large boat (**BT2**), with a full daytime service (**SD3**) during the peak season only (**SY3**). No fare is charged (**F$1**). The service is operated not by GOIS but by GIPEC (**MA7**), and off-island staging is handled at the BMB (**OIS5**) and in the BMB's immediate vicinity, including the street in front (**OIS7**).

Note that elements within a category need not be exclusive—note that **OIS5** and **OIS7** are both highlighted, reflecting the current off-island staging arrangement. As another example, if the island were served by boats from Brooklyn, then cell **FO3** could also be highlighted. (Some categories are internally exclusive, however; note, for instance, that only one element in category **SD** can be selected.)

All of the four alternatives are represented in this form in Appendix D (which shows *all* of the element categories, not just the ferry transportation element categories as in Figures 27 and 29).

Correspondence to General Management Plan alternatives
Currently, the GOIS General Management Plan team is considering three preliminary GMP alternatives, broadly:

- Alternative A: Focus on the national monument
- Alternative B: Island-wide experience
- Alternative C: Focus on New York Harbor and beyond

(Appendix C2, the December 2004 Governors Island planning newsletter, lists these alternatives in more detail.)

As the planning team works to develop these preliminary concepts into more detailed "draft GMP alternatives," they may change. However, they have been taken as a starting point for developing corresponding transportation alternatives, which are discussed in this section. The overall idea is that the GMP-planning and transportation-planning processes can inform one another, so that, ultimately, the preferred GMP alternative, when selected, includes a well-thought-out transportation component, consistent with the desired on-island visitor experience and other GMP goals, that can then be the basis for a detailed, implementation-oriented transportation plan.

Each of the transportation alternatives presented here—which, until fully analyzed as part of a detailed transportation planning effort, should be considered high-level planning concepts—can be evaluated along generally the same lines as those described for the transportation elements in Section 3. However, where the elements are evaluated individually, at the component level, the alternatives should be evaluated more broadly, as they represent different element combinations.

- How does the transportation alternative contribute to improving the visitor experience? What can be said of likely visitor demand, acceptance, and/or enjoyment?
- How does the transportation alternative contribute to protecting the park's natural and cultural resources?
- Does the transportation alternative provide any other advantages to the park—such as enabling partnerships, or facilitating the creation of broader links throughout New York Harbor?
- Does the transportation alternative contribute to the park's operational efficiency, reliability, and/or sustainability?
- What is the transportation alternative's effect on public safety and security?
- What is the physical feasibility of implementing the transportation alternative? What engineering or environmental documentation would be required?
- What is the procedural/managerial feasibility of implementing the transportation alternative? How would the park relate to stakeholders; what is the likely stakeholder support? What private investment/stakeholder collaboration might be expected? Does the transportation alternative lend itself to combining Governors Island transportation services with other recreational or commuter services?
- What is the financial feasibility of implementing the transportation alternative? What park and stakeholder expenditures would be necessary?
- What are the short-term and long-term implications of implementing the transportation alternative?

Ultimately, in selecting a preferred transportation alternative as part of the GMP process, the central question becomes, "What are this transportation alternative's advantages and disadvantages compared to other alternatives; does this transportation alternative, compared to the others, best meet the preferred GMP alternative?"

It is important to emphasize, again, that this report does not select a preferred transportation alternative. Such selection is properly part of the GMP process—and, as the GMP alternatives

evolve from their current preliminary state, the transportation alternatives will need to evolve as well.

The remainder of this section is devoted to an explanation of the four transportation alternatives, as they correspond to the preliminary GMP alternatives currently under consideration.

Common and early actions

Regardless of which GMP alternative is ultimately selected for implementation, the GOIS GMP planning team has identified certain actions which will be taken in any case. Several are pertinent to transportation, specifically:

- Establish partnerships with compatible organizations on and off-island to help achieve the NPS's goals for historic preservation and visitor programming.
- Develop a visitor contact station adjacent to Soissons dock.
- Rehabilitate the NPS dock [Pier 102]—the historic point of access.
- Ensure safe, convenient and affordable public access to the National Monument. This item is particularly important—regardless of which GMP alternative is selected, *GOIS must guarantee public access.* Access can be guaranteed by GOIS-operated service, by a GOIS-administered contract, or by formal arrangement with GIPEC (or another partner).

Alternatives A1 and A2—monument emphasis

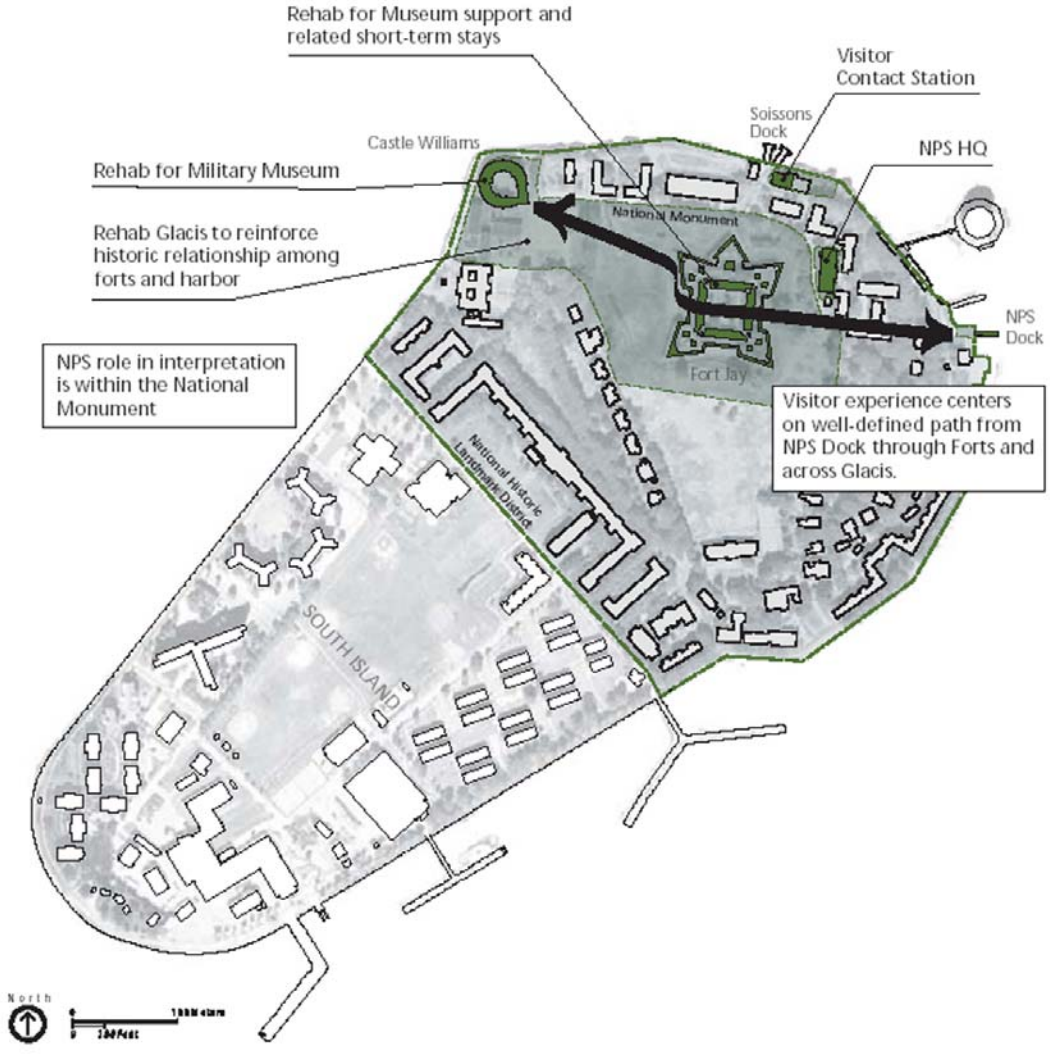
Preliminary alternative description (from GMP team)
In Alternative A, NPS would offer visitors a complete story of the island's history and significance through public programs within the National Monument boundary.

Interpretation and education would focus on military themes. NPS would help visitors understand and make personal connections to the development of the island's defensive features and its military occupation from 1794 to 1996.

Historic preservation treatments for the forts and related landscapes could range from structural stabilization to extensive rehabilitation to allow for uses that are compatible with military themes.

Partnerships would focus on developing and coordinating public programs within the National Monument, access and transportation to the NPS facilities, and operational agreements for the provision of services and maintenance of NPS buildings and grounds.

Figure 30
Preliminary GMP Alternative A
Source: Governors Island newsletter, December 2004



Indicated transportation alternatives

Preliminary GMP Alternative A actually presents two transportation alternatives—Alternative A1 assumes a minimum of change from the current arrangement (that is, continuing cooperation with GIPEC on providing visitor transportation services); Alternative A2 assumes that GOIS enters into its own contractual arrangement to provide guaranteed visitor transportation.

Alternative A1. Essentially, under this alternative, transportation service to the island would continue to be provided via arrangement with GIPEC—from the BMB, to Soissons Dock, using the *Coursen*. Unlike the current service, however, a full daytime service would be run year-round, with a fare charged to passengers (probably collected directly by GIPEC or its transportation concessioner). If GIPEC renovates the BMB to incorporate passenger staging and waiting facilities, those would be available to park visitors; otherwise, no particular facilities would be available in Manhattan.

On the island, the current land transportation arrangement—limited and/or emergency services provided by electric-powered vehicles—could continue to be provided by GOIS, at its own cost, although other on-island arrangements are possible; the GIPEC water transportation partnership could be built upon and made to extend to land transportation as well. However, since GMP Alternative A calls for a focus on the national monument itself, it may not be thematically appropriate for GOIS to be involved in broader on-island transportation issues.

In general, beyond the partnership arrangement with GIPEC, GOIS itself would not be involved in the provision of services to the island. The implied advantage is that GOIS need not concern itself with the costs or logistics of transportation in order to guarantee public access; a possible disadvantage is that GOIS could have little control over the specific transportation services provided, and park visitors may not be accommodated as much as are visitors bound for GIPEC-administered destinations on the island. However, an additional advantage is that since this arrangement is, for the most part, already in place, the ramp-up time and investment would be minimal.

Alternative A2. Alternative A2, while still compatible with GMP Alternative A, assumes that GOIS will arrange its own water transportation services. Compared with Alternative A1, this arrangement could yield greater flexibility and responsiveness in terms of park visitor transportation; however, GOIS would need to take a much greater direct involvement in the logistics and finances of such an operation.

There are several differences between A2 and A1. First, since the GIPEC transportation partnership would no longer be at the center of park visitor transportation, GOIS probably would not have access to the BMB in Manhattan (although such access could be possible if GIPEC renovates that facility to accommodate commercial operations). Second, along the same lines, service would have to be to an NPS-owned dock, as opposed to Soissons Dock—meaning that, unless a new dock were constructed on NPS land (which may be unlikely, given cost, navigability/permitting, resource-protection, and historic-preservation issues), Pier 102 would need to be renovated and made ADA-compliant. That, in turn, implies the use of smaller (<149 passenger) boats than the *Coursen*.

As with Alternative A1, Alternative A2 would provide a full daytime, year-round service, with a fare charged. While GOIS could theoretically operate this service itself, making arrangements to collect the passenger fare, precedent indicates that the more likely scenario is that GOIS would contract the service, probably with a single commercial operator (although multiple contracts could be feasible in the longer term). Access to Governors Island would therefore be from whatever Manhattan or other origin points are maintained by the operator; off-island staging would be the responsibility of the operator and would most likely not involve specific facilities beyond those currently available to private operators' ferry passengers.

On-island transportation would be similar to Alternative A1, except that since Alternative A2 removes the GIPEC water transportation partnership, a GIPEC on-island transportation partnership becomes less likely, reducing the possibility of regular service throughout the entire island (since the GOIS focus under GMP Alternative A is on the national monument).

Given the Regional Plan Association's visitor estimates for Governors Island, Figure 31, below, estimates the costs associated with two possible implementation variations of Alternative A2.

Figure 31
Estimated Alternative A2 operating costs
Source: Volpe Center

Cost Element	Battery Park-Govs. Isl. Concession passenger-only service, from Battery Park, 1/2 hr peak headway, 1 hr off peak	Battery Park-Govs. Isl. Concession passenger-only service, from Battery Park, 1 hr peak & off peak headway
Total Round Trips	6015	3285
Total Operating Hours	3315	3315
Boat(s)	1	1
Crew (per boat)	2	2
Consumables (fuel, lubricant)	$95,664	$39,983
Labor, boat crews	$186,761	$186,761
Allocated Vessel maintenance	$58,088	$50,050
Allocated insurance	$18,750	$18,750
Allocated debt service	$96,714	$96,714
TOTAL OPERATING COST	**$455,978**	**$392,258**
Break-even Revenue Projection for $3 Average Fare		
Passengers	**189,991**	**163,441**
@ PAX Capacity %	**10.60%**	**16.70%**

As described in Section 2 (and shown in Appendix C1), RPA has estimated a potential national-monument visitation of 229,333. Assuming notional round-trip passenger fares for this service of $4 for adults and $2 for discount riders (such as children, retirees, and students), and therefore an average fare of roughly $3 per passenger, the break-even calculation of the two possible service variants shown in Figure 31 above indicates that even a park visitation as low as 163,441 could sustain this kind of transportation service. Therefore, it appears that this kind of service, from Battery Park, has a strong chance of succeeding financially, especially with the understanding that a service dedicated to the park would require patience for several years as public knowledge of the park grows. The chosen scenario is for is a demonstration service to support the park during its operating hours in 2006 and to continue in similar fashion for a number of years following.

Assumptions for the analysis in Figure 31 include:

- The (passenger-only) service would run from a Battery Park departure point to Pier 102 (1.41 nautical miles, round trip)[*]. Although the exact legal and cost arrangements are unknown at this time, it is assumed that there will be no dockage fees.
- The proposed schedule would be one of the two following:
    - Peak service schedule: 8 am until 8 pm every day to match the park's assumed operating hours (similar to those of Fort McHenry National Monument and Historic Shrine in Baltimore, Maryland), with headways every half-hour (the first column of Figure 31) or every hour (the second column), May through October.
    - Off-peak service weekends 8 am until 5 pm every day, service every hour, November through April.
- The boat chosen for the analysis is a conventional monohull "Subchapter T" vessel. There are several reasons for the choice:
    - The route is very short and there is no advantage in the use of a faster, advance design boat.
    - An older monohull can be purchased or leased at a reasonable cost. The general type is assumed is that of, for instance, New York Waterway's "Port Imperial," or similar. Principal particulars: 77-foot length; 20-foot breadth; 6-foot depth; 69 gross registered tons, 149 passengers, 1,000 hp, built 1984.
    - The value of the boat is estimated at $750,000.
    - There is no need for specially trained crew. The boat would have a master and one deck hand.
- Annual crew labor costs are identical for both options; varying headways during the peak season does not change the fact that the crew must remain in pay status for all scheduled operating hours each day. Longer headways reduce consumables and maintenance costs significantly, however, partly due to an assumption that the boat will operate in idle less in that schedule mode (the crew will shut the engine down rather than run at idle for 45 minutes each hour). Insurance and debt service are also constant for the two scenarios. The net result is that doubling schedule frequency during the peak season would only cost an additional $63,720.
- The average per-passenger fare of $3 can be considered to be reduced 20 percent, to $2.40, in order to account for the general/administrative costs of operating the service.

[*] Since Soissons Dock is virtually the same distance from the BMB, the numbers in Figure 30 could theoretically apply to service there, if the given boat type could be accommodated.

Alternative B—whole-island experience

Preliminary alternative description (from GMP team)
Under Alternative B, NPS would collaborate with other cultural and arts organizations to preserve and interpret the National Monument, providing visitors an island-wide cultural experience.

Fort Jay, Castle Williams, and the glacis would form the nucleus of NPS activities and serve as a springboard for involvement in the larger contexts of the National Historic Landmark District and greater island.

Rehabilitated National Monument structures and landscapes would serve as venues for cultural events, such as art expositions, performances, and educational symposia, attracting broad and diverse audiences. Programs in NPS facilities would be coordinated with other island owners, operators, and tenants.

NPS would interpret the island's history from locations throughout the island: within the National Monument boundary, at island arrival points, and at other key historical points of interest.

Figure 32
Preliminary GMP Alternative B
Source: Governors Island newsletter, December 2004

Indicated transportation alternative

Since GMP Alternative B assumes a whole-island experience, enabled by an ongoing partnership with GIPEC, it is possible to define a single, appropriately corresponding transportation alternative, although variations are possible.

Essentially, Alternative B envisions a combination transportation services—a continuation of the current GIPEC water-transportation partnership, supplemented by additional contracted services to docks other than Soissons.

The current GIPEC service from the BMB to Soissons Dock could still be at the heart of Alternative B (configured as in Alternative A1). However, as with Alternative A2, GOIS could also contract its own services to Pier 102. Alternative B goes further, envisioning more service—possibly to Lima, Tango, or Yankee piers (depending on GIPEC rehabilitation of those facilities), and possibly to a new GIPEC-constructed dock (either for general passenger use or for special events). In general, there would be more (and more dispersed) transportation service to Governors Island under Alternative B. As noted in the GMP alternative description, GOIS would provide interpretive services (installing interpretive signage, deploying park rangers, or doing both) at island arrival points, even when transportation services are not provided by a GOIS-contracted service.

On-island transportation has the potential to be more integrated, and more comprehensive, than in Alternative A. Regular service throughout the historic district, or throughout the entire island, could be provided by relying on ongoing partnerships with GIPEC or other appropriate stakeholders. Dedicated vehicles (whether vans, buses, or open-air trams) would be operated via contract or through GIPEC or another partner; a fare would either be collected separately for on-island transportation or would be included in the fare for water transportation. (Fare arrangements would depend on whether a water transportation provider also operates the on-island services, or whether on-island transportation is contracted separately.)

Also, water and on-island transportation services for special events—especially those such as performances or concerts, which could involve thousands of visitors to the island—would provided by GIPEC or its contractors.

In terms of cost, the information under Alternatives A1 and A2 also applies here; under Alternative B, GOIS will rely on a combination of GIPEC-partnership service, in which case direct GOIS involvement logistics in financing is unnecessary, and contract service. Given the short distance of the Battery Park-to-northern-Governors Island route (whether to Soissons Dock or Pier 102), it is likely that that is the route most likely to be attractive, at least in the short term, to private operators. It was not possible, given the scope of this effort, to estimate the costs of operations from other points, or assuming different visitation scenarios.

Alternative C—harbor and beyond

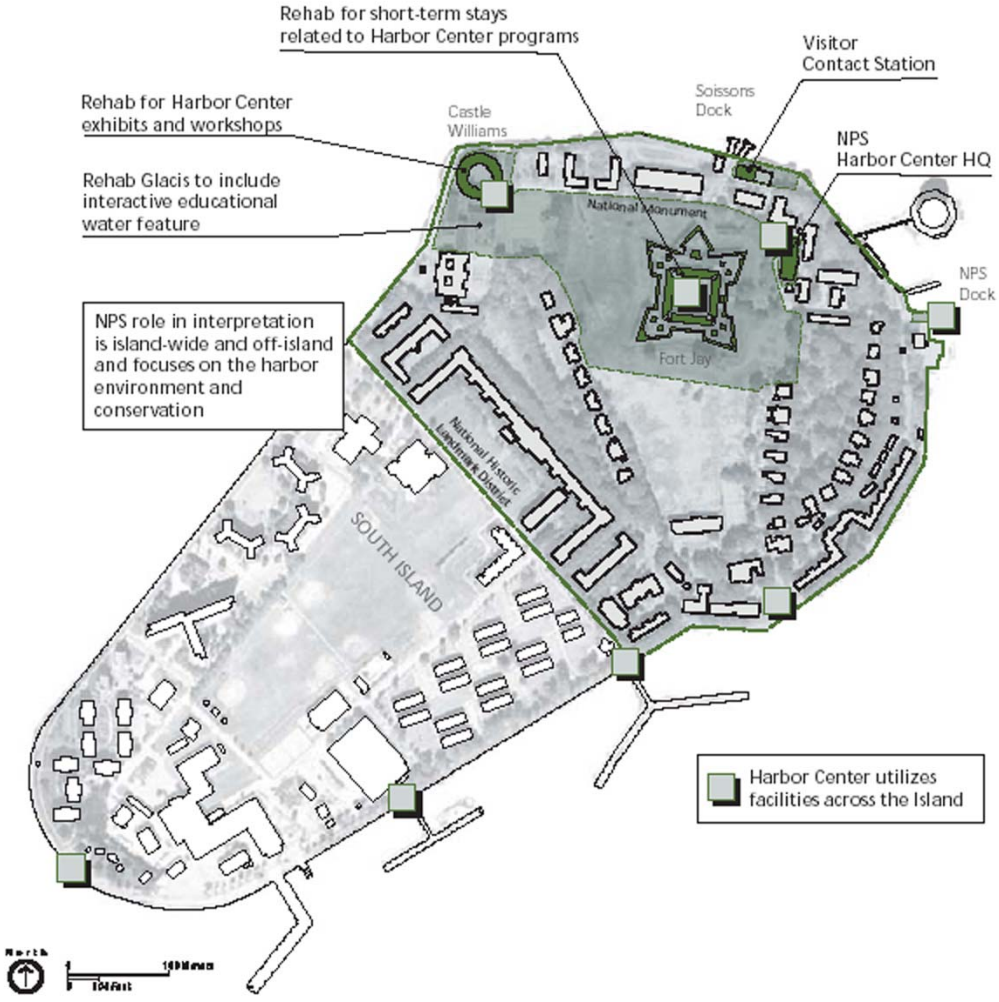
Preliminary alternative description (from GMP team)
In Alternative C, NPS would offer visitors opportunities to explore topics that extend beyond the National Monument and island, and extend out to the greater harbor and region.

Alternative C capitalizes on Governors Island National Monument being the most centrally located of the National Parks of New York Harbor, and the symbolic centerpiece of all the natural and cultural resources arrayed around the harbor.

NPS would rehabilitate National Monument structures to participate in a "Harbor Center" concept for the island. Temporary and permanent installations within the National Monument, complemented by other facilities on the island, would explore the natural environment and conservation of the island and New York Harbor.

Partnerships would be pursued with educational, environmental, maritime, and other harbor-related partners within the region and from around the country to develop and manage public programs.

Figure 33
Preliminary GMP Alternative C
Source: Governors Island newsletter, December 2004



Indicated transportation alternative

Alternative C assumes more and stronger partnerships with relevant stakeholders as well as a more robust and cooperative relationship with the National Parks of New York Harbor; indeed, Alternative C could provide the impetus for NPNH to create a stronger, more centralized presence for itself, and could motivate NPNH to seek the leverage necessary to, for instance, secure landside transportation facilities. In terms of transportation, Alternative C is similar to Alternative B, but with several additions.

First, only Alternative C assumes transportation linkages between Governors Island and the other water-accessible National Parks of New York Harbor; especially given the security restrictions at Statue/Ellis, it is likely that more direct NPNH involvement would be necessary in order to enable such linkages. Indeed, depending on the visitation patterns, such services may not be profitable in and of themselves; if operated by contract, as is most likely given the lack of NPS funds available for transportation operations, they may need to be provided as an adjunct to profitable services (either to Statue/Ellis or to Governors Island) or subsidized by NPNH or another partner.

Also, it is most likely under Alternative C that NPS—through NPNH—will be able to secure its own landside passenger facilities, probably not dedicated to Governors Island but shared among GOIS, Statue/Ellis, and Gateway, at least in Manhattan. (Pier A could be a candidate for such a facility.)

In general, Alternative C assumes more transportation links to Governors Island. If GOIS is involved in transportation service contracts at all, it is likely to be with multiple operators, serving multiple points of origin; indeed, under Alternative C GOIS could choose to make Pier 102 more broadly available, either by allowing access via incidental-use permit (as opposed to contractual exclusivity) or, less likely, by allowing public access. Although GOIS would still need to guarantee public access to the park, the multiplicity of transportation services to Governors Island under Alternative C obviates the need to rely on any one particular service; a baseline relationship with GIPEC could still be at the heart of visitor access to the island.

On-island transportation could be similar to the scenario envisioned in Alternative B, but Alternative C assumes the presence on the island of more partner organizations, one or more of which could provide some form of on-island transportation.

Note on Pier 102

As described below in Section 5, GOIS has already requested funds from the NPS Alternative Transportation Program to rehabilitate Pier 102 and to make it accessible. The current understanding is that such funds will not be made available through ATP for several years.

Although it may be possible to seek such funds through other NPS programs (such as line-item construction), from partners, or from other federal sources (such as the Ferry Boat Discretionary Program, which requires a 20% match from another funding source), another possibility is private investment—a private transportation operator committing to capital upgrades (or the loan of a floating dock) in exchange for guaranteed exclusive access via contract. However, until uncertainty about the market for transportation to demand to Governors Island—probably until GOIS and GIPEC formalize and embark upon their implementation and development plans—abates, it is possible that a private operator would hesitate to make such an investment.

Furthermore, until GOIS is able to make Pier 102 available for passenger service, there will necessarily be a dependence on GIPEC alone to provide visitor transportation to the island. Even if GOIS and GIPEC do not end up cooperating on development of the island, in other words, transportation will be a necessary partnership until Pier 102 enters service. To the extent that GOIS may wish to be able to act independently of GIPEC with regard to development, staffing, programming, or relationships with other organizations, the terms of this partnership may be a topic of some sensitivity. (Even if Pier 102 comes on line, GOIS will still depend on GIPEC for the ability to transport vehicles to and from the island, as described in Section 3.)

Section 5: Preliminary action items for implementation

The items listed here—while not part of a single, recommended transportation alternative—can be considered by GOIS as the GMP process moves forward.

The ultimate selection and implementation of a preferred transportation alternative will be an outcome of the GMP process. However, some preliminary alternative transportation implementation activities—"action items"—can at this stage be identified and addressed, irrespective of which transportation alternative is eventually chosen.

These action items can either be pursued alone (funded via the Alternative Transportation Program) or together with other plans or processes, such as the GMP effort currently underway. Funding for such activities can come from additional, approved ATP projects, from other NPS sources (e.g., GMP, fee-demonstration, line-item construction), or non-NPS sources, including relevant stakeholders. In general, it is logical that the most low-cost, easy-to-implement action items be pursued first, progressing as appropriate to more expensive, complicated undertakings.

Each of the action items below is explained in terms of the following:

- A general description of the item.
- Corresponding roles and responsibilities/coordination activities with partners/stakeholders.
- Possible funding sources.
- Suggested timeline.

1. Request "Phase II" planning funds

As stated earlier, this study was commissioned in connection with the GOIS GMP. As a high-level transportation study, it was intended to inform the GMP planning process and to aid in the conception and development of GMP alternatives (ranging from no action to various implementation possibilities). Scope, budget, and schedule limitations prohibited the creation of a totally comprehensive transportation plan identifying a step-by-step roadmap to implementing a preferred transportation alternative. The creation of such a plan could happen, appropriately, as part of a follow-on "Phase II" planning study, picking up where the finished GMP would leave off and taking place in coordination with GIPEC and other identified partners.

In February 2004, GOIS submitted to WASO/ATP—via the Project Management Information System (PMIS)—a request for funds to enable a "Phase II" planning study. As of November 2004, PMIS 107235, requesting $100,000, is to be considered for funding as part of the FY09 ATP budget. It is strongly recommended that GOIS, via the Northeast Region Office, seek earlier project approval. As an island park, GOIS is entirely dependent on water transportation, and a comprehensive plan is necessary to ensure the consistent, reliable delivery of transportation services that enable the park to achieve its visitor-experience and resource-protection goals.

It is possible that follow-on planning activities could be coordinated with the National Parks of New York Harbor; see item 3, below.

2. Request funds for improvements to Pier 102

Pier 102 is the only NPS-owned gateway to Governors Island and, therefore, is a critical asset. As described earlier in this report, it is in need of upgrades and other rehabilitation, including an accessible floating dock, consistent with the requirements of the Americans with Disabilities Act, to enable embarkation and debarkation by visitors with mobility impairments.

GOIS has previously submitted two PMIS proposals to WASO/ATP for improvements to Pier 102—PMIS 95397, requesting $285,000, and, in February 2004, PMIS 107240, requesting $750,000. As of November 2004, both PMISes are to be considered for funding as part of the FY09 ATP budget. As

with the "Phase II" study described above, it is strongly recommended that GOIS, via the Northeast Region Office, seek earlier approval of funding for Pier 102 improvements. As an island park, GOIS is entirely dependent on water transportation, and guaranteed availability of an accessible transportation gateway is necessary to ensure the consistent, reliable delivery of transportation services that enable the park to achieve its visitor-experience and resource-protection goals.

It is possible that certain improvements to Pier 102—possibly including the installation of a temporary floating dock, to be used until the more significant funding for a permanent floating dock is secured—could be undertaken on a faster schedule, especially if it is possible to coordinate with the National Parks of New York Harbor (see item 3, below) or with partners. One or more New York Harbor water operators may be willing to provide (or fund, whether wholly or partly) a temporary accessibility solution at Pier 102, possibly even in time for the 2005 season, if certain terms of service are agreed to. GOIS may be able to rent a floating dock for one or more seasons, if necessary, although ATP funds would probably not be available for this purpose.

Additionally, NPNH has been working with the New York State Department of Transportation to submit a request for funding through the federal Ferry Boat Discretionary Program; such funding, if available, would require a 20% match. (ATP funds can be used as matching funds.)

3. Coordinate with NPNH

It may be possible to coordinate transportation planning with the other National Parks of New York Harbor. As described earlier in this report, several parks have already undertaken their own planning—Gateway National Recreation Area commissioned two transportation studies, in 2001 and 2003; Statue of Liberty and Ellis Island National Monument is currently engaged in its own General Management Plan effort, possibly including a transportation component.

A PMIS submittal, for a unified National Parks of New York Harbor water transportation planning effort to study the creation of a single Manhattan visitor access gateway, was submitted to WASO/ATP in February 2004. Its current disposition is not known. If ATP funds are not forthcoming, it may be possible to seek additional planning funds via the other parks, or from other funding sources NPNH may access, including external partners and/or fundraising. GOIS should also work closely with NPNH on ongoing planning issues, such as potential NPS use of Pier A in Battery Park.

Another NPNH coordination task—investigating the possibility of borrowing or transferring the floating dock formerly used by Gateway at Riis Landing for temporary installation at Pier 102—appears to be infeasible, based on discussions during 2004. However, Gateway—drawing on its experiences with water transportation at both Riis Landing and Sandy Hook—may be a source of expertise for Governors Island as transportation planning continues to move forward.

4. Coordinate with GIPEC on planning activities

GIPEC is an essential partner. Coordinating planning activities, as has been done as part of the GOIS GMP and the GIPEC master-planning process, has the potential to yield significant savings in terms of money, time, and effort—and could greatly enhance both the visitor experience and the public perception of "Governors Island." GIPEC will be moving forward with its planning activities regardless of progress by GOIS on its GMP, meaning that in order to make the best use of a partnership with GIPEC, GOIS will need to pay constant attention to GIPEC's activities, in several areas:

Passenger ferry service

GIPEC is currently responsible for coordinating passenger ferry service to Governors Island, at Soissons Dock, from the Battery Maritime Building. During 2004, seeking a more financially advantageous contract, GIPEC considered several versions of, and ultimately issued, a Request for Proposals aimed at seeking lower-cost bids to provide such service. As part of the RFP process, GIPEC conducted discussions with several New York Harbor water transportation operators. It is

imperative that GOIS participate as closely as possible in these discussions, so that GOIS transportation planning, to such an extent as is possible, builds from—rather than duplicates—GIPEC efforts. Coordinating passenger ferry service, as noted above, not only promises great cost and administrative savings but can enable the creation of a superior visitor experience.

Floating dock/passenger access
As with GOIS at Pier 102, GIPEC is considering the installation of one or more floating docks or other accessible passenger entry points to Governors Island—and, as with ferry service, this activity is best coordinated, especially with regard to permitting and environmental-documentation costs and procedures, as well as construction time and logistics. As described in Section 2, it may be possible to construct only one floating dock at either Pier 101 or Pier 102; GOIS and GIPEC, therefore, need to coordinate dock planning.

Fortunately, it appears at present that GOIS and GIPEC have similar thoughts about using the Pier 101/102 area as a passenger gateway to the island, at least in the short term. However, the GOIS GMP will need to acknowledge additional entry points that may be considered by GIPEC, such as at the south of the island (for special events).

Vehicle ferry service/access
Currently, GOIS does not itself arrange for vehicle access to the island; such service is available solely through the GIPEC ferry contract. As described in Section 3, however, GOIS has an interest in continuing vehicle access, and so should coordinate planning in this area with GIPEC.

One idea raised by GIPEC during 2004 is the possible construction of a dedicated vehicle-ferry access point, to enable construction, maintenance, and related activities. Such a dock could be constructed away from Soissons Dock, at a more convenient location that would obviate the need for vehicles to intersect the main visitor areas. This plan would have serious implications for passenger access to the island, especially if GOIS continues to rely on GIPEC-contracted ferry service as its main means of visitor transportation. The future of Soissons Dock as a passenger ferry terminal could be uncertain. At the same time, however, a dedicated vehicle-access dock could be beneficial to GOIS as well as GIPEC, easing the logistical and management burdens of reconciling passenger and vehicle ferry service needs and removing a potential impediment to the visitor experience. In fact, a vehicle-access dock could also, during special events, be configured for passenger use by large boats—facilitating the movement of large crowds during the special events (such as performances) envisioned by GIPEC, particularly if the dock were to be constructed on the southern side of the island, where crowds are expected to be accommodated.

Visitation estimates
As mentioned earlier in this report, the only Governors Island visitation estimates at present are those prepared several years ago by the Regional Plan Association, using assumptions that do not take into account the most up-to-date planning by either GOIS or GIPEC. New estimates are essential to properly planning for expected visitor volumes; such estimates should coordinate GIPEC development alternatives under consideration with the preferred GOIS GMP alternative (when selected). GOIS should work with GIPEC and RPA—and possibly with additional partners as well—to produce updated visitor estimates. (GIPEC consultants may be preparing such numbers as part of the GIPEC master-planning process.)

On-island transportation
GOIS and GIPEC share similar concerns regarding on-island transportation, especially since there will be no physical barriers between the two areas, and particularly since there will be a requirement for the provision of some level of on-island transportation no matter which development alternatives come into force. Given current program eligibility criteria, ATP funds can be used for on-island transportation planning and also for a future vehicle purchase, if a procurement can be identified; however, ATP funds cannot at present be used to pay for vehicle operations. These criteria indicate a partnership opportunity with GIPEC—if on-island

transportation needs are planned and identified, with routes and services defined that correspond to the eventual GOIS GMP and GIPEC master plan, NPS may be able to purchase vehicles that could then be operated by GIPEC (possibly via partnership or contract), depending on the timing and availability of funds. Other partners/stakeholders could also be involved.

It is possible that ATP eligibility criteria may change to enable financial support for vehicle operations, and GOIS should keep abreast of developments in this area.

Transportation administration

One overall way to facilitate ongoing coordination with GIPEC could be acomprehensively reworked relationship focusing on transportation—perhaps the establishment of an explicit partnership to handle all transportation matters on behalf of both GIPEC and GOIS (such as a "Governors Island Transportation Partnership"). Such a partnership could not only effectively address transportation to and on the island, but could present a singular, unified point of communication and administration to partners and stakeholders, such as New York Harbor water-transportation providers. Institutionalizing cooperation in this way would also establish a new paradigm that relies, by default, on the acceptance of a formal GOIS/GIPEC partnership; both GOIS and GIPEC would be kept fully informed and up-to-date on all transportation matters, without the concern of having to coordinate and resolve potential conflicts between the separate efforts of two organizations.

Also, as discussed in Sections 3 and 4, it is essential to work with GIPEC in order to produce accurate cost estimates—and to ensure that costs to GOIS or its contractors, in the various scenarios involving cost distributions with GIPEC, are no more than appropriate.

Appendices

Several appendices accompany this report as separate (Word, Excel, and PDF) files.

- Appendices A1 and A2 include additional information produced by David Porter, of Childs Engineering, detailing schematics and cost estimates for improvements to the NPS-owned dock, Pier 102.
- Appendix B includes information on "comparable" national parks and other areas accessible only by water transportation:
    - Appendix B1 includes details culled from the GMPs of the other national parks accessible only by water transportation.
    - Appendix B2 presents selected data (size, visitation, transportation management arrangements) from "comparable" national parks and similar non-NPS areas.
    - Appendix B3 is a summary of visitation data for comparable parks.
- Appendix C1 shows the detailed visitor projections calculated by the Regional Plan Association. Appendix C2, the December 2004 GMP planning newsletter distributed by GOIS, provides more details on the three GMP preliminary alternatives currently under consideration.
- Appendix D provides details on the transportation elements and transportation alternatives.
- Appendix E presents a detailed list of current New York Harbor ferry routes, including major service characteristics (operator, schedule/frequency, fare, boat type), as available.
- Appendix F presents detailed route-by-route ridership information, based on data provided by the New York City Department of Transportation.