DRAFT

WATER TAXI SYSTEM CONCEPTUAL FEASIBILITY ANALYSIS NEWPORT BEACH, CALIFORNIA



PREPARED BY
THE NEWPORT BEACH WATER TAXI
EXPLORATORY COMMITTEE
September 2009

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EXECUTIVE SUMMARY, CONCLUSIONS & RECOMMENDATIONS

Purpose & Scope of the Newport Harbor Water Taxi System Feasibility Analysis

The City of Newport Beach has incorporated the concept of a water taxi system for Newport Harbor in several key policy decisions and documents, including its General Plan and Local Coastal Program Land Use Plan, and in the strategic plans of the City's Economic Development Committee and Harbor Commission.

This water taxi system would supplement city land transportation street networks and existing cross-harbor ferry service with additional on-water access serving Newport Harbor (NH) and its adjacent visitor-serving and recreation areas during peak summer visitor traffic and usage levels when the existing land transportation network is extremely congested.

A May 2009 City Council Resolution called for the formation of a Water Taxi Exploratory Committee of interested individuals from the Economic Development Committee, the Harbor Commission and local maritime and tourism industry to advise and make recommendations to the City Council on policies, projects and programs to accomplish the Committee's objectives:

- a. Determine the extent of need and the potential expansion of interest in and use of a NH water taxi system over time, based on experience of other systems' evolutions;
- b. Determine existing in-kind City resources and facilities available for a NH system;
- c. Examine other relevant water taxi systems and their specific applicability to NH;
- d. Explore the availability of potential grants and subsidies for a NH water taxi system;
- e. Analyze the conceptual feasibility of a potential NH water taxi concept plan;
- f. Prepare a conceptual feasibility report by December 1, 2009, with recommendations to the City Council on next steps necessary to have an initial water taxi system in operation in Newport Harbor during Summer 2010, if possible.

This report describes the analysis effort, findings and recommendations of the Water Taxi Exploratory Committee from June through September 2009.

Determining Need and Market Support For A Newport Harbor Water Taxi System

As described above, the <u>need</u> for a water taxi system is supported by several City of Newport Beach policy decisions and documents. Market support interest has also been sampled.

Recent (August/September 2009) "testing of potential market interest" in a possible Newport Harbor water taxi system was conducted during this study through news articles in local (*Los Angeles Times |Newport Daily Pilot*) and boating media (*Sea Magazine|Log Newspaper*) as well as a TV news story and multiple potential user interviews on Channels 2 and 9 news programs.

Responses to the idea of a Newport Harbor water taxi service, as indicated through letters to the editor of the *Pilot*, on news blogs, and during the multiple field interviews in Newport in

the TV news story and other interviews were generally positive, with costs to users and the community, convenience and routes and possible pollution as the primary areas of concern.

Estimating market demand of passenger levels for a possible Newport Harbor water taxi service using traditional methods of market demand projection such as "market capture share" and other forecasting techniques requires an extensive quantitative demand survey.

Developing and conducting such a survey to professionally-credible levels of accuracy and reliability is beyond the scope/level of detail/timing of this study's charge and the skills and availability of its citizen volunteer and City staff Committee.

A common method of estimating market demand for a water taxi service/system in a particular region/market is to analyze the history and performance of one or more existing water taxi systems in that region and market which are considered generally comparable to a proposed system. In this analysis, the operating history of the Marina Del Rey Water Taxi service & system has been utilized as a regional market example comparable to a conceptual system which might serve Newport Beach.

Based upon comparability with the MDR example, a generalized market demand estimate of initial and evolving ridership levels has been used for a conceptual Newport Beach Water Taxi system (15-16 week summer operation only):

Initial Operating Season estimated range of 8,000 to 10,000 riders second Operating Season estimated range of 15,000 to 20,000 riders estimated range of 25,000+ riders

Prospective water taxi operators responding to a potential City RFP will perform their own ridership, rate structure and revenue projections as part of their pre-proposal due diligence and feasibility-testing efforts, providing the City with a knowledgeable estimate of potential market demand and support made by the same entities intending to serve this market.

Other Comparable Water Taxi Systems

An overview research effort into the characteristics of other harbor water taxi systems in California and the U.S. operating during Summer 2009 was conducted to determine the characteristics of, and potential applicability to, a potential Newport Beach water taxi system in terms of:

- markets served local, tourist/visitor, seasonal, commuter, pedestrians, bicyclists
- **levels and types of demand** numbers of users, individuals, groups, charters, etc.
- route systems loop, point-to-point, on-demand, scheduled, flexible, hybrid
- docking facilities public, private (restaurant, bar, resort, hotel, etc.), ADA-capable
- support services and facilities restrooms, parking, signage, dock agents, ADA
- financial characteristics- capital & operating costs, fees, revenues, subsidies
- management /operating system private operator for public agency, public transit
- linkages to other transport auto parking, bicycles, buses, shuttles, taxis, rail, air
- **contact systems** telephone, Internet, brochures, dock agents, signage
- flexibility ability to add service for peak periods/demand, change routes

Five Southern California water taxi systems and one Florida water taxi system were selected for further review from over a dozen systems initially considered: (see chart below)

- Santa Barbara Harbor Water Taxi
- Channel Islands Harbor Water Taxi
- Marina del Rey Waterbus
- Long Beach AquaBus & AquaLink
- San Diego Water Taxi
- Fort Lauderdale Water Taxi (FL)

SOUTHERN CALIFORNIA &	SOUTH	FLORIDA	HARBOR WA	TER TAX	I/FERRY	SYSTE	MS -S	UMMER 2	2009	
AREAS/HARBORS										
SOUTHERN CALIFORNIA	Existing	Multi-Stop	Point-to-Point	On-Call	Seasonal	Annual	Stops	Operator	Subsidy	Vessels
Santa Barbara Harbor	х	Х	X	Х	х	х	2	private	no	1
Channel Islands Harbor	х	Х		Х	х		6	private	yes	2
Marina Del Rey	х	Х	х	Х	Х		7	private	yes	5
Long Beach Harbor/ ABay										
Downtown/Rainbow Harbor WT	Х	Х		Х		Х	6	private	yes	1
Alamitos Bay Shuttle	Х	Х		Х		Х	3	private	yes	1
Newport Harbor (Balboa Ferry)	х		X		х	х	2	private	no	3
San Diego Bay	х	X	X	Х		х	10	private	yes	2
SOUTH FLORIDA										
Fort Lauderdale Area	Х	Х	X	Х	х	Х	11	private	yes	8
Notes:	2. Most s 3. Marina	ystems are in Del Rey and	tem is "green"-c flexible,able to s d Ft. Lauderdale	hift from route sys	multi-stop tems are t	to point- he most	to point similar	: based on to NB Hart	actual de or charac	mand
			ystem information ng NB Balboa Fe							ailable

The Marina Del Rey Water Taxi System in Southern California and the Ft. Lauderdale Water Taxi System in South Florida are the most comparable system examples.

Water Taxi Vessel Types Suitable For A Newport Harbor Water Taxi System

Background research was performed during this conceptual feasibility analysis to determine what types of vessels are currently most commonly utilized in California and other U.S. water taxi services and suitable in a potential Newport Harbor water taxi service. A wide range of vessel types was examined in this analysis.

The larger NB-comparable-example water taxi fleets (Marina Del Rey, Ft. Lauderdale) with multiple routes and vessels have two basic vessel sizes/capacities (number evolves w/need):

Basic Service Water Taxi Vessel (loop routes) 18-28 passengers, 30'-40', 2-4vessels Peak Use Waterbus Vessel (loop & p-t-p routes) 30-90 passengers, 50'-70', 1+ vessels

The large number of smaller private docks in Newport Harbor which could potentially be served by an "on-call" water taxi capability, a third category of vessels should be considered:

Small Water Taxi Vessel ("on-call" routes) 8-12 passengers, 18'-25', 2+ vessels

The City may want to consider offering preference or incentives to prospective operators with "green" vessels/fleets with proven and reliable technologies.

The selection, purchase/lease/transfer and use of water taxi vessels forming a future Newport Harbor water taxi fleet are the responsibility of a City-selected private operator.

Existing & Potential Public & Private Docks For a Newport Harbor Water Taxi System

The 10 existing public piers/docks in Newport Harbor can serve as the initial and primary docking infrastructure and drop-off/pickup/storage stops for a potential water taxi systems

These public piers/docks provide general public water-land access around most of the Harbor perimeter among important public uses (parking, bay and ocean beaches and piers, etc.) and commercial centers and attractions throughout Newport Harbor and adjacent areas.

Use of these existing public docks, after appropriate renovation, signing and use ordinance updating (fishing area restrictions, allowing commercial use for public purposes, etc.) would enable an immediate startup of an initial/expandable water taxi system using selected public docks. It also represents a cost-effective expanded and diversified use (public water transportation) of an important existing City public infrastructure/transportation asset.

New public docks at the Rhine Wharf and other locations will expand this infrastructure in 2010 and could also provide a possible central Lower Bay/Harbor water taxi base of operations, service, night storage, and public parking at the City's Lower Castaways site.

Gaps in this public dock system exist along the important, but traffic-congested, visitor-serving Mariners Mile and Lido Marina Village waterfronts, which would benefit from improved accessibility of new public docks or publicly-accessible private visitor docks filling these gaps.

Use of existing and potential private commercial use, club and restaurant guest docks throughout the Harbor would provide an additional 12-20 docks/stops for a Newport Harbor water taxi system, assuming the coordinated cooperation of dock owners, the water taxi system operator and the City. Eight existing restaurant guest docks, as shown in the City's new *Complete Cruising Guide to Newport Harbor* and in this report are already coordinated for public access through their reservation systems and could be served by a water taxi system.

Water taxi service to these and other private docks, as well as any possible service to and from private residential docks, would be used only on an "on-call" basis controlled through the system's central dispatcher and restaurant reservations, to avoid conflicts and overuse.

Other sources of existing and potential use of private commercial docks for potential water taxi system stops include existing, new and planned waterfront commercial and mixed-use developments with marinas and docks and the renovation/new construction of commercial marinas in the Harbor, such as the new Balboa Marina and planned Newport Bay Marina.

All of these new projects are required by the City to include designated docks which are accessible to the general public from land and water, with the control of access and separation from a secured marina accomplished through design and operational management by the

designer and owner. Existing waterfront commercial uses may also wish to provide watertaxi-access docks.

The existing and potential public and publicly-accessible private docks in Newport Harbor form an excellent, expandable infrastructure network of water taxi stops with access to all of the major commercial, recreational and public amenities surrounding the Harbor.

Potential Routes/System Service Types For a Newport Harbor Water Taxi System

Typically, water taxi routes and system service types are based upon the numbers and types of docks/stops on the route, the areas served, the configuration of the water taxi water area, vessel fleet size, and the operating modes and flexibility desired by the system operator and the City.

Route and system types generally fall into three categories or a mix of two or three types.:

1. a "loop" route system which connects several stops/docks around a large or complex water area or waterways system and generally has two or more vessels circulating in opposite directions around the loop simultaneously.

Examples of this type of system are Marina Del Rey and Ft. Lauderdale, with MDR running on a flexible "every few minutes" schedule and Ft. Lauderdale running on a published time schedule.

Generally these systems use multiple, mid-capacity 30-60+/- passenger vessels and have dock agents and communications which enable them to modify routes to skip empty stops, add vessels at peak periods, and retain some flexibility of service.

2. a "point-to-point" route system which connects two or three stops/docks on opposite sides or ends of a water area or connecting two water areas and may have a single vessel making round trips or multiple vessels making opposite-directions trips at the same, or staggered, times.

Examples of this type of system are the Balboa Ferry, with flexible "every few minutes" schedules and the Long Beach Waterlink and the Santa Barbara Water Taxi, with published time schedules.

Like the loop system, these p-t-p systems use mid- capacity 30-60-passenger vessels and have dock agents and communications which enable them to add vessels at peak periods, and retain some flexibility of service scheduling.

3. an "on-call" system which has no fixed route system other than an effective service radius due to speed and type of vessel, type and size of water areas, and number and type of potential destinations.

Examples of this type of system are the Catalina Island shoreboats at Avalon and the Isthmus, Newport yc shoreboats, and the San Diego Water Taxi. This type of service is extensively used in water areas with extensive mooring and anchorage areas, residential piers, and as a "designated driver" in areas like Newport Harbor.

Generally these systems use multiple, lower capacity 8--20+ passenger vessels and have a communications dispatcher which enables them to schedule multiple pickups if required, modify routes while underway, add vessels at peak periods, and thus maintain complete flexibility of service.

Potential destination areas and the three water taxi route/system types which could serve them include: (route/system/service types shown in **bold abbreviations**)

Loop Route/System = LP
Point-to-Point Route /System = PTP
On-Call Route /System = OC

Primary Destination Areas & Docks Providing Access (LP, PTP, plus some OC)

Mariners Mile (no public docks; poss. private docks at Villa Nova, BBC, NSB, OCC) (LP) Lido Marina Village/Peninsula/Head of Rhine/Cannery Village (Rhine Wharf dock)(LP) Lower Rhine/Newport Pier Area/Ocean Beaches (19th/15th St. docks, NM priv. dock)(LP) Balboa Island Marine Avenue /Bayside Vill./BI Beaches (Park, Coral, Sapphire dks)(LP) Balboa Village/Pier/Fun Zone/Flyer/ Museum/Sportfish(Ferry) (PTP, OC) Dunes Resort/Back Bay Bistro/Launch Ramp (DR,BBB, LR docks)(PTP, OC)

Peninsula Public Parking Areas (19th St dock, Ferry, Washington St. dock)(LP)

Secondary Destination Areas & Docks Providing Access (primarily OC, some PTP)

Moorings, Anchorages (any public dock) (OC)

Yacht Clubs (any nearby public dock, all yc docks) (OC)

Marinas (marina guest docks) (OC)

Harbormaster (harbormaster guest dock) (OC)

Harbor Resources (Balboa Yacht Basin public dock/HR dock) (OC)

Waterfront / Water-Accessible Residences (private docks as permitted by resident) (OC)

Harbor Beaches (Balboa Island public docks, Harbormaster guest dock) (OC)

Ocean Beaches (any public docks on Peninsula, Balboa Ferry dock) (OC, PTP)

Boat / Kayak Rentals (nearest public dock)(OC)

Newport Aquatic Center (NAC dock)(OC)

Newport Sea Base (NSB dock) (OC)

Collegiate Sailing & Rowing Center (CSRC dock) (OC)

Remote Parking Areas (Dunes dock, other docks in proximity to RPA's as created)(OC)

A potential Newport Harbor water taxi system is likely to require a "hybrid" of all three route/system types to meet Harbor configuration, distance, location, and user group needs.

This will be determined by the system operator working in conjunction with the City to achieve the overall system objectives.

Potential Costs, Revenues, Funding Options of a Newport Harbor Water Taxi System

The start-up costs of a water taxi system such as vessels, equipment, personnel, and initial operating overhead costs and capital can be significant relative to potential revenues and are generally funded either by the operator or a government agency, or a combination of both.

In some jointly-funded water taxi system startups, cash, loan and credit investments may be made by both the private operator and the government agencies (city, county, regional transportation agency, state, etc.), along with other contributions or investments such as existing operator-owned water taxi vessels and personnel, use of public docking facilities, etc.

Many of the existing water taxi systems analyzed in this study received public-agency startup (and continuing operations) funding in the form of federal, state and local transportation agency grants and loans as the result of funding requests implemented as part of a implementation plan for supplemental public transportation or a similar public program.

As a local-region example, the Marina Del Rey Waterbus system, several months prior to its Summer 2009 operating season, received a \$300,000 start-up subsidy from Los Angeles County to enable four vessels to be constructed and to support other startup costs.

In general, it appears that most successful water taxi systems of the potential size and complexity necessary and desirable for Newport Harbor have received some form of significant public agency and/or private startup subsidy in order to commence operations.

Based upon the research performed in this analysis, which has included both existing water taxi systems and those proposed in various other feasibility studies, it appears that:

- the range of potential startup funding costs for the private operator of a multistop, multi-vessel, summer season Newport Harbor water taxi system could range from \$200,000 to \$300,000, depending upon the system routes and services offered, number and type of vessels, etc.
- City startup costs to upgrade public docks, provide signage, other "in-kind" startup elements might approximate \$50,000 to \$60,000, which would also represent an asset upgrade investment through improvements to public docks. A possible Lower Castaways operating base would be an additional cost.

These generalized private and public startup cost ranges should be considered only as "order of magnitude" estimates appropriate to the conceptual nature of this analysis, are not based on a specific plan, and are not conclusions or recommendations of this study.

Potential operating costs for a water taxi system operator generally consist of:

- debt service costs (if any) related to purchase of vessels; rehab of existing vessels;
- docking, fuel/electricity and related costs to berth and power the vessel fleet;
- maintenance and repair, depreciation costs of the vessel fleet;
- employment costs (salaries, benefits, etc.) of vessel captains, crew, other staff;
- overhead costs of operation (insurance, accounting, legal, security, advertising, etc.);
- fees, lease payments/percentages, taxes paid to local, state and federal agencies

Potential operating revenue sources for the operator could include:

- individual and group fares on regular routes and from "on-call" service, all based on market demand/pricing and ridership volumes, special fees (bicycles, etc).;
- special event and charter revenues (to the extent they are part of markets/business);
- possible sale of beverages/food on vessels, event catering services on vessels, etc.;
- possible advertising on/within vessels, on website, by area businesses;
- possible sale of logo/brand gear featuring the water taxi system.

Potential operating revenues to the City include:

- fixed operating lease or agreement payment(s), (+penalty for non-performance);
- variable operating revenue percentage payments based on performance;
- fees for business operation and harbor use permits, other fees at startup/renewal;

Fares (2009) for seven Southern California water taxi systems analyzed in this study varied from the \$1 for a one-way daytime adult fare on the Marina Del Rey Waterbus, Long Beach Aquabus, and the Balboa Island Ferry to \$7 for the San Diego Water Taxi, for a fare average of \$3.63. (Balboa Island Ferry has higher rates for vehicles +\$2 + \$1/passenger, bicycles \$1.50)

The NB-similar Fort Lauderdale (FL) water taxi system charged \$5 for a one-way adult ticket, \$15 for an all-day ticket and \$80/mo for a commuter ticket book. They also raise their daily rate to \$7 per adult after 7PM.

Of the eight water taxi systems analyzed, five - Channel Islands, Marina Del Rey, Long Beach (2), San Diego Bay, and Ft. Lauderdale (FL) - operated in 2009 with some level of subsidy.

Three systems used various types of public transportation funding to partially or largely subsidize fares, except for Channel Islands and San Diego Harbor, which used private subsidies by their respective harbor lessees associations. The Marina Del Rey water taxi vessels were also subsidized by a one-time start-up subsidy.

Three water taxi systems (Santa Barbara, Catalina Island Shoreboats, and the Balboa Island Ferry-all unique water transportation systems) had no subsidy -Santa Barbara system has other revenue sources in addition to fares and the BI Ferry has a multiple-source rate structure, while the Catalina system has been generally self-supporting on fares alone.

Three Newport Harbor Water Taxi System Concepts

This section of the analysis and report variously combines these factors and elements and their related conclusions and choices/cautions into three concepts for Newport Harbor water taxi systems to serve as a basis for community discussion and decision-making.

- **1. Basic System:** a limited water taxi service and system initiated as a one-season "trial run" to test market, facilities, vessels, operations and financial performance, with an option to expand operations and duration of the operating agreement if feasible and desirable.
- 2. **Expanded System:** an expansion of the Basic System, adding vessels, routes, schedules, trip frequency, hours of operation, fees and other services as supported by demand and plans based on initial year performance, with extended operating agreement and other changes as appropriate.
- **3. On-Call-Only System:** a system with vessels grouped at a central base or bases which respond only to requests for dock pickup and dropoff locations relayed by a dispatcher/reservation center and from dock "agents" handling walk-up business at high-volume docks throughout the harbor.

Basic Newport Harbor Water Taxi System

The elements of this Basic System alternative are shown on the Basic System Plan, as a suggested "starter kit" combination of temporary and existing facilities for a single-season, basic <u>system test</u> of an operating concept jointly developed by the City of Newport Beach, the waterfront business community and a selected private water taxi operator.

In this example, a fixed-base location/site, all construction and facilities rentals would be for an interim, temporary use, removable if the system did not continue for a second season, or if the potential Lower Castaways site is required for a higher-priority public purpose. Alternative basing sites could be proposed by City and/or the selected private operator, or by a local private waterfront commercial use/marina meeting the basing criteria.

Base: A <u>temporary</u> "test" base at the City's Lower Castaways (or othe) site, including:

- fleet storage/service docks ADA-capable boarding docks, utilities, lighting, signage
- parking for public, employees w/lighting, signage, Dover access / lights synchro
- trailer-based offices, ticketing, restrooms, f&b kiosk, shade structure waiting areas
- pedestrian walkways (lighted and signed) connecting all of above areas

Vessels: A "test mix" of vessels ("green" to the extent feasible) including:

- 2 (+1 reserve) medium-capacity, 18-28 passenger(bike/stroller/ADA-capable) vessels
- 2 (+1 reserve) small-capacity, 8-12 passenger vessels (for on-call service)
- 1 large capacity 30-90 passenger vessel (for peak, group, special event use)

Docks: A combination of public docks/stops & private docks: (private suggested only)

Public Docks/Stops (regular routes) (6 total)

- Lower Castaways Base Dock (new/temp.) (parking)
- Coral Ave Dock (BI) (existing)
- Washington Street Dock (Peninsula) (existing)
- 19th Street Dock (Peninsula) (existing)
- Rhine Wharf Dock (Lido/Rhine) (new in 2010)
- Launch Ramp Dock (Back Bay) (existing)(as-requested/on-call)(remote parking)

Private Docks (as-requested/on-call only) (potentially 15 total-this list)

- Balboa Bay Club (existing)

- Balboa Marina visitor dock (existing)
- 8 Dock & Dine Restaurant Docks (existing)
- 5 Yacht Club Visitor Docks (existing)

Routes: A combination of loop, point-to-point on fixed routes and on-call on random routes **Loop Route**

- 6 Public Docks/Stops (2 vessels on staggered clockwise/counterclockwise routes around Harbor perimeter; stops only at docks with confirmed passengers per agents) **Point-to Point Routes** (examples only)
- Base to Launch Ramp Dock (remote pkg) & return (1 vessel or more per agent)
- Base to 19th Street Dock (Newport Pier) & return (1 vessel or more per agent)

On-Call Routes

- Base to requested pickup and dropoff mooring/anchorage/dock locations, per call **Schedule:** Loop on semi-fixed schedule, point-to-point & on-call as required **Loop Routes**

- Base-West & East Harbor Loops: 20 minutes each way, plus loading times **Point-to Point Routes**
- Base -LRD-Base: 10 minutes each way, 10 min. loading/unloading each end
- Base-19th St-Base: 15 minutes each way, 10 min. loading/unloading each end **On-Call Routes**
- No schedule, trip time based upon pickup-dropoff distances at 4-5 knot speed

Fare:

- (Fare structure to be determined by selected operator/market)



Expanded Newport Harbor Water Taxi System

The elements of the Expanded System alternative are shown in the Expanded System Plan as a potential expansion of the initial Basic System vessels, docks/stops, routes, and schedules.

Base: The Base at the City's Lower Castaways site (or other)would be maintained/upgraded:

- fleet storage/service docks ADA-capable boarding docks, utilities, lighting, signage
- parking for public, employees w/lighting, signage, Dover access / lights synchro
- trailer-based offices, ticketing, restrooms, f&b kiosk, shade structure waiting areas
- other uses and equipment deemed necessary after initial year experience
- pedestrian walkways (lighted and signed) connecting all of above areas

Vessels: An expanded mix of vessels ("green" as feasible) would be provided as needed:

- 3-4(+1reserve)medium-capacity,18-28 passenger vessels (for loop service)(+1-2?)
- 3-4(+1 reserve) small-capacity, 8-12 passenger vessels (for on-call service)(+1-2?)
- 1 large capacity 30-90 passenger vessel (for peak, group, special event use)(same)

Docks: Expanded public docks/stops & private docks: (private suggested only)

Public Docks/Stops (regular routes) (total – 14; 8 docks <u>added</u> in expansion italicized)

- Lower Castaways Base Dock (expanded for added vessel storage)
- M Street Dock (Peninsula) (existing)
- Park Avenue Dock (Balboa Island) (existing)
- Coral Ave Dock (BI) (existing)
- Sapphire Ave. Dock (BI) (existing)
- Balboa Yacht Basin (Bayside) (existing)
- Opal Ave. Dock (BI) (existing)
- Washington Street Dock (Peninsula) (existing)
- 19th Street Dock (Peninsula) (existing)
- 15th Street Dock (Peninsula) (existing) or Marina Park Dock (new 2012+)
- Rhine Wharf Dock (Lido/Rhine) (new in 2010)
- Central Avenue Dock (possibly new in 2011+?)
- Launch Ramp Dock (Back Bay) (existing)(as-requested/on-call)(remote parking)

Private Commercial/YC/Institutional Docks (as-requested/on-call only) (22+ total)

- Balboa Bay Club (existing)
- Balboa Marina visitor dock (existing)
- Newport Bay Marina (2011-12) (new)
- Lido Village Marina (2011-12) (new)
- Ardell Site Marina (2012+) (new)
- Collegiate Sailing/Rowing Center (existing); Sea Base (existing) NA Center (existing)
- 8 Dock & Dine Restaurant Docks (existing) (plus added D&D restaurants, number unk.)
- 5 Yacht Club Visitor Docks (existing)

Routes: A combination of loop, point-to-point on fixed routes and on-call on random routes **Loop Route**

- 6 Public Docks/Stops (2 vessels on staggered clockwise/counterclockwise routes around Harbor perimeter; stops only at docks with confirmed passengers per agents)

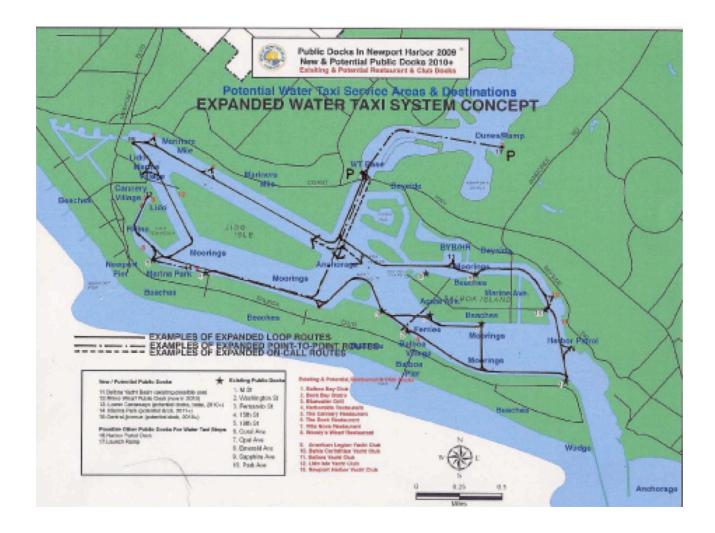
 Point-to Point Routes (examples only)
- Base to Launch Ramp Dock (remote pkg) & return (1 vessel or more per agent)
- Base to 19th Street Dock (Newport Pier) & return (1 vessel or more per agent)

On-Call Routes

- Base to requested pickup and dropoff dock locations, per call (vessels variable)
- Base to requested pickup and dropoff mooring/anchorage locations, per call

Schedule: Loop on semi-fixed schedule, point-to-point & on-call as required **Loop Routes**

- Base-West & East Harbor Loops: 20 minutes each way, plus loading times **Point-to Point Routes**
- Base -LRD-Base : 10 minutes each way, 10 min. loading/unloading each end **On-Call Routes**
- No schedule, trip time based upon pickup-dropoff distances at 4-5 knot speed **Fare:**
 - Fare structure determined by selected operator, based on initial year experience, mkt.



On-Call-Only Newport Harbor Water Taxi System

This On-Call-Only System conceptual alternative is shown on the On-Call Plan, and includes a fleet of water taxi vessels at a central base with no set schedule or routes, responding only to requests for dock pickup and dropoff locations relayed by a dispatcher / dock "agents"

Base: A base at the City's Lower Castaways site, or at another site, including:

Vessels: A mix of small & medium vessels ("green" to the extent feasible)

Docks: public and private docks, as requested through dispatcher and dock agents:

Routes: No specific routes with on-call random routes as generated by dispatcher, agents

Schedule: unscheduled, on-call as required during operating hours, trip time speed-limited

Fare: Fare structure determined by selected operator/market



CONCLUSIONS

The results of this analysis effort and report by the Newport Beach Water Taxi Exploratory Committee indicate that <u>a potential Newport Harbor Water Taxi System (NHWTS) appears conceptually feasible in terms of:</u>

- 1. City policy support (previously documented, currently supported)
- 2. Potential community, user group support, operator interest (limited sample)
- 3. Potential market demand (based on regional examples, confirmation needed)
- 4. Existing water taxi system models/operators on which to base a NHWTS model
- 4. Existing & potential public and private docks/base to support service areas/uses
- 5. Existing & potential water taxi vessel types suitable for Newport Harbor use
- 6. Potential routes and operating systems (loop, point-to-point, on-call)(+ ferry)
- 7. Existing & potential costs, fares, revenues, sources options (right combo needed)
- 8. Potential NHWTS concepts (among many) for Basic, Expanded or On-Call-Only

Note: The Newport Beach Water Taxi Exploratory Committee recognizes that the <u>detailed</u> feasibility determination of any potential Newport Harbor Water Taxi System depends upon a complex interaction of City decisions, actions and negotiations as well as potential private operator due-diligence confirmation (or not) of market, operational, and financial feasibility of the system, operating agreements and other factors beyond this report scope.

RECOMMENDATIONS

The results of this analysis effort and report by the Newport Beach Water Taxi Exploratory Committee <u>recommend the following next steps toward implementing a potential Newport Harbor Water Taxi System</u>.

- 1. City Staff reviews WT Committee Report and provides refinements as needed
- 2. City Council Study Session reviews, discusses Revised Report, gives go/no go
- 3. If "go", City Council authorizes Staff to prepare Draft Request For Proposals (RFP), schedule, and necessary actions to provide City facilities, sites, funding, etc.
- 4. City Council reviews, discusses RFP, needed City actions, OK's issuing of RFP
- 5. RFP submittals due 30 days, responses reviewed, interview candidate(s) selected
- 6. City/selected operator negotiate operating agreement, start implementation

Note: The Newport Beach Water Taxi Exploratory Committee recognizes that these Recommendations /Next Steps may not be able to be accomplished within a time frame which would enable the water taxi system to be in place by Summer 2010, but recommends that the City continue to pursue implementation on that schedule for at least a Basic "test" system by Summer 2010, and not later than Summer 2011.

TECHNICAL REPORT

BACKGROUND & PURPOSE

BACKGROUND & PURPOSE

The primary impetus for this Newport Beach Water Taxi Conceptual Feasibility Analysis and Report resulted from the Strategic plan developed by the City's Economic Development Committee (EDC), and approved by the Newport Beach City Council in May 2009.

Objective 4.5 of the Strategic Plan for Fiscal and Economic Sustainability states:

"The City will invite proposals for the implementation of a privately owned and operated summer water transportation service with funding supplemented by grants, private contributions and public monies. Research should be conducted into the transferability of existing models in Los Angeles County and other areas."

Action steps for this objective called for the formation of a committee of interested individuals from the Economic Development Committee, the Harbor Commission and local maritime and tourism industry to lead this effort.

The members of the Water Taxi Exploratory Committee included:

Michael McNamara, Chairman Economic Development Committee Richard Luehrs Economic Development Committee

John Corrough Harbor Commission

Chandler Bell Marine Business Representative
Mark Silvey Marine Business Representative
Gary Sherwin Conference & Visitors Bureau

John Robinson Restaurant Association

In addition, City Staff assisting and advising the work of the committee included:

Sharon Wood
Leigh De Santis
Economic Development Administrator
Economic Development Coordinator
Chris Miller
Shannon Levin
Sharon Wood
Assistant City Manager
Economic Development Coordinator
Harbor Resources Division Manager
Supervisor, Harbor Resources Division

The Water Taxi Exploratory Committee's charge was to advise and make recommendations to the City Council on policies, projects & programs to accomplish the Committee's mission oF:

- (1) Researching successful water taxi systems that may be suitable models for a summer-seasonal water taxi service in Newport Beach;
- (2) Researching potential City in-kind support such as use of portions of public docks as water taxi stops and other services as well as potential public agency grants or other non-City public and private funding sources and subsidies to fund capital and operating costs of a summer water taxi system;
- (3) Preparing a conceptual feasibility report assessing the potential elements and issues associated with a Newport Beach summer water taxi service and all of its necessary operations;

(4) Recommending strategies, funding methods and sources and possible methods of implementing a water taxi system in Newport Harbor through a combination of City and private sector efforts.

OTHER CITY POLICIES SUPPORTING WATER TRANSPORTATION/WATER TAXIS

The idea of a water taxi system as supplemental water transportation was included as a part of the City's newly-updated General Plan where, in the Circulation Element of the General Plan, the City has established a goal of:

"Enhanced and maintained public water transportation services and expanded public water transportation uses and land support facilities (Policy HB 6.5)

The Plan also includes a policy on expanded water transportation modes (CE 5.2.2)

"Promote opportunities to expand water transportation modes, such as water-based shuttle services and water taxis." (Policy HB 6.7)

Implementation of the Marine Transportation Element of the General Plan stated:

The City shall conduct a study to evaluate the feasibility of marine transportation services a supplement to automobile use. Marine transportation docking, buildings and support facilities such as parking throughout the coastal areas of the City shall be evaluated and modified as necessary and feasible to coordinate with the surrounding transportation system." (Imp 16.12)

The City has also supported expanded water transportation in the Local Coastal Program Land Use Plan (2-59)

"The City supports expanded use of water transportation uses linking the Harbor with other visitor-serving and recreation destinations and providing cross-Harbor service."

Additionally, a policy (2.9 1-6) in the Local Coastal Program Land Use Plan states that (The City will)...

..." Maintain and enhance existing public water transportation services and encourage and provide incentives for expansion of these uses and land support facilities."

The Newport Beach Conference and Visitors Bureau has adopted a Three Year Strategic Destination Plan that calls for a new water taxi service as one of its strategic initiatives.

Finally, the Newport Beach Harbor Commission has had a harbor-wide water taxi system listed on its Priority Action Items Checklist and has helped draft and has supported City policies since its inception in 2002. The Harbor Commission continues to support the concept of a water taxi system for Newport Harbor in this analysis.

COMMITTEE GOALS FOR A POTENTIAL WATER TAXI SERVICE

In order to properly shape the water taxi system analysis effort, the Water Taxi Exploratory Committee initially established several broad Goals for a water taxi system:

- 1. Make Newport Harbor a more "user-friendly" harbor for visiting boaters, residents and visitors by providing additional water transportation services;
- 2. Serve special harbor events such as boat shows, boat parades, Christmas lighting and other festivities as well as NB-based yacht races with a water taxi system;
- 3. Provide water taxi service to boating visitors, live-aboard vessel residents and cross-harbor commuters in peak traffic periods and dinghy dock usage periods;
- 4. Provide an alternate/supplemental water transportation system for the City that will reduce auto traffic volumes and congestion and reduce the potential for impaired onland and on-water driving in peak day and night periods;
- 5. Increase revenues for water-related businesses and the City as a result of water taxi activities providing increased access to waterfront and near-water businesses;
- 6. Provide opportunities and incentives for a potential private-sector water taxi operator to make the water taxi service economically viable through additional non-fare revenue sources, in-kind City participation (docks) and other means;
- 7. Make Newport Harbor and its waterfront uses and recreation areas more accessible to persons with physical disabilities through an ADA-compatible water taxi system and its supporting approaches and facilities.

OBJECTIVES OF THE WATER TAXI CONCEPTUAL FEASIBILITY ANALYSIS

In addition to the initial Water Taxi System Goals stated above, the Committee also set some initial Objectives for the Conceptual Feasibility Analysis to achieve, as possible:

- a. Determine the extent of need and the potential expansion of interest in and use of a NB water taxi system over time, based on experience of other systems' evolutions;
- b. Determine existing in-kind City resources and facilities available for a NB system;
- c. Examine other relevant water taxi systems and their specific applicability to NB;
- d. Explore the availability of potential grants and subsidies for a NB water taxi system;
- e. Analyze the conceptual feasibility of a potential NB water taxi concept plan;
- f. Prepare the conceptual feasibility report by December 1, 2009, including recommendations to the City Council on steps necessary to have an initial water taxi system in operation in Newport Harbor during Summer 2010.

"PROOF OF CONCEPT" WATER TAXI SYSTEM FEASIBILTY CHECKLIST

This analysis of a potential Newport Harbor water taxi system <u>concept</u> (as contrasted with a detailed specific system) focuses on determining the general feasibility of such a system by determining if the various elements necessary to support such a concept are, or could be, present, thus providing a "proof of concept" test of a comprehensive system .

This report focuses on each of the system elements comprising the following **feasibility checklist**, under the assumption that if they are all present (or possible) in some basic form, a prospective private water taxi system operator could be found, through a selection process, to develop and operate the system.

These **feasibility checklist elements**, described in the Technical Report sections, are:

- 1. Policy Support & Perceived Need, Market Support Model, Confirmation
- 2. Comparability To Similar Successful Water Taxi Systems
- 3. Availability of Existing & Potential Docks/Stops at Service Areas/Facilities
- 4. Availability of an Appropriate Potential Vessel Fleet, Vessel Types
- 5. Possible Routes Among Areas & Facilities Served, Scheduled & On-Call Service
- 6. Financial Issues, Available & Potential Funding Sources & Choices

These system assumptions and operational elements are then variously combined in **three conceptual systems (of many possible)** to serve as a basis for City review and discussion and, in refined form with the additional appropriate language, as the basis for a Request For Proposals (RFP) to be provided to prospective water taxi system operators.

These **three concepts** form the seventh item in the conceptual feasibility checklist:

7. Three Concepts For A Newport Harbor Water Taxi System

It is emphasized that this analysis process and report do not establish or prove the detailed operational and/or financial feasibility of a potential Newport Harbor Water Taxi System, but rather provide a general "proof of concept" of such a system that is sufficient to enable further City consideration and refinement of the concept and to proceed to a RFP process and operator selection, if the City decides to proceed.

POLICY & MARKET SUPPORT

Policy & Market Support For A Newport Harbor Water Taxi System

Policy Support

As noted in the preceding Background & Purpose introduction to this Conceptual Feasibility Analysis and Report, there has been substantial public, City Staff and Council discussion of the desirability and potential value of a Newport Harbor water taxi service and system.

This has been followed by broad City and public policy support for such a service as evidenced from the quotes on this subject from numerous City planning, harbor management and transportation documents prepared, adopted and implemented over the past 8-10 years.

Past Market Experience of Newport Beach Water Taxis

Several intrepid private entrepreneurs have attempted, at various times during the past 15 years, to achieve single-vessel or limited-use "on-call" water taxi service to docks at the harbor's many waterfront restaurants and waterfront residences, supplementing the steady cross-harbor water transportation service provided by the Balboa Ferry for over 90 years.

None of these efforts have been commercially successful or have continued actively beyond their initial year of operation, with various reasons given by their operators (interviewed for this analysis) for their demise. (See Other Water Taxi Systems section of this report)

These reasons included: (sources: operator interviews, study comparison w/other systems)

- NB existing "competing" ferry, rental boats, residents' "bay boats", tour boats
- initial undercapitalization, lack of financial staying power to establish viability
- lack of adequate operating revenues through fares, other sources/need for subsidy
- too few/inadequate types of vessels to accommodate eventual growth in demand
- lack of operator experience specific to water taxi service characteristics
- $\bullet\ inadequate\ continuing\ advertising/promotion\ /\ linkage\ with\ destinations\ sponsors$
- lack of available/suitable dock facilities at or near commercial/public destinations

Past & Current Market and Operating Experience of Other Water Taxi Systems

Other water taxi systems in California and U.S. harbors, including many waterfront community harbors similar to Newport Harbor, (some of which are described in the Other Water Taxi Systems section of this report) have had mixed-to-good-success in financial operations and volume growth during the past decade or more, attributed to a number of factors: (stated as historic trends, currently subject to some effects of the 2008-09 recession)

• they were initiated, and have continued as, extensions of city and regional public transportation agency systems of trains and busses where federal and state funding

(ISTEA, others) for <u>supplemental</u> transportation systems (land shuttles, water taxis) was obtained early as "seed money", and is continuously sustained, to provide operating cost and fare subsidies of both publicly and privately operated systems; (the Long Beach, Marina Del Rey and Ft. Lauderdale systems included in this study)

- they have been supported financially and promotionally through combined advertising, discount, ticketing and event access "bundling" programs by the commercial, restaurant/bar, resort, and recreation uses they serve, as well as by local and regional Chambers of Commerce, marine trade and resort industry associations;
- in other small-to-medium sized harbors without the extensive ferry, rental boats, residents' "bay boats", tour and dinner cruise charter boat fleets of Newport Harbor, the "water taxi" service also performs many of these services and derives diverse and lucrative additional revenues from them and supporting services (catering, commuter shuttle, etc.) and is seen as a "universal" vessel for many activities on the water. (Channel Islands, Ft. Lauderdale, Santa Barbara Harbor systems, many others)
- they have lasted through the initial years of low revenues and creating a market identity and have established themselves as key, familiar elements in the visitor and resident experiences in their harbor communities while steadily evolving their services and schedules to meet changing market needs and preferences.

Market Demand/Continuing Support Issues For a Newport Harbor Water Taxi Service

Testing of Potential Market Interest

Recent (August/September 2009) "testing of potential market interest" in a possible Newport Harbor water taxi system was conducted during this study through news articles in local (Los Angeles Times /Newport Daily Pilot) and boating media (Sea Magazine/Log Newspaper) as well as a TV news story and multiple potential user interviews appearing on Channels 2 and 9 news programs.

Responses to the idea of a Newport Harbor water taxi service, as indicated through letters to the editor of the Pilot , on news blogs, and during the multiple field interviews in Newport in the TV news story and other interviews were generally positive, with costs to users and the community, convenience and routes and possible pollution as the primary areas of concern.

Informal interviews of Newport Beach residents and visitors were also performed by Committee members during the course of this analysis and resulted in a generally favorable response to the concept.

Many of these interview respondents were curious about the potential details of such a local system, and offered ideas and opinions based on their experiences with other Southern California, U.S. and international water taxi systems. The Marina Del Rey, Long Beach, San Diego, and Catalina systems were most frequently cited as examples.

Are water taxis on their way?

Newport Beach Chamber president says most water taxis rely on government subsidies and those already tried in Newport Harbor couldn't work out numbers.

By Brianna Bailey

Updated: Thursday, August 6, 2009 9:47 PM PDT There are 7 comment(s) View Comments

ewport Beach officials are eyeing the possibility of creating a water taxi service that would ferry tourists and pedestrians to restaurants and parks around Newport Harbor during the summer months, but some aren't sold on the feasibility of the idea.

"I think it's a good idea if we can figure out how to do it in an economical way," said Newport Beach City Councilman Mike Henn, who heads up the city's Economic Development Committee. "I'm hopeful we will find a way to do it. It would be very a nice enhancement for the businesses of our harbor and cut a little traffic and parking out of the mix."



The water bus used in Marina del Rev.

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Helicopter support ended in tragedy for police



The water taxi concept is still in its early stages. City officials created an exploratory committee of local business leaders to look into the possibility of creating a water taxi service earlier this year.

The committee is now in the process of looking into the viability of offering a water taxi service during the summer months in Newport Beach.

"What we've found is that there is some interest from the public for such a service, but whether or not that public interest is sufficient to warrant a private enterprise or other entity to provide the service is yet to be determined," said Richard Luehrs, president of the Newport Beach Chamber of Commerce.

Luehrs also sits on the water taxi exploratory committee.

The cost of the developing a water taxi in Newport Beach could vary largely on what kind of service the city wants, Luehrs said.

A shuttle service that runs on a loop around the harbor is bound to be more costly than a taxi that people can call on their cell phone to come pick them up, he said.

"There have been services that have run in the past that people have tried to do just from a private enterprise perspective, but they just break even," Luehrs said. "For the money, the cost outweighed the benefit of providing the service. There have been a couple of different attempts to do it, but they just couldn't pencil out."

Water taxi services in other California harbors typically rely on some sort of government subsidy to keep them going, Luehrs said.

A summer water taxi service operated in Marina del Rey by Hornblower Cruises, which runs June through September and costs passengers \$1 to jet to one of seven stops around the marina, depends on funding from Los Angeles County.

The water taxi exploratory committee in Newport Beach is in the process of wrapping up its findings and should be ready to present them to the city in the next few months, Luehrs said.

LA Times/Pilot Article on NB Water Taxis, August 7, 2009

Water Taxis May Cruise Into Newport Harbor

By: Ambrosia Sarabia I Thursday, August 20, 2009 12:00:00 AM

Last updated: Tuesday, September 08, 2009 10:01:00 AM

NEWPORT BEACH — Boaters and shoreside visitors may be able to take advantage of a water taxi service in the harbor next summer, if the city's Economic Development Committee determines the service is both feasible and will enhance visitor services here.



On-water Transportation – Newport Harbor visitors may be able to catch a ride on a water taxi similar to the Water Bus that runs in Marina del Rey (pictured). The city has directed a committee to examine the feasibility of the service. "I think there are people who are interested in the concept," explained Richard Luehrs, committee member and president of the Newport Beach Chamber of Commerce. "The struggle that we have here is how we make it financially viable."

The water taxi concept had been proposed by many private enterprises and individuals in the past, but a harbor-wide service has never been successfully established.

A future Newport Harbor water taxi service might resemble the popular boat service now being operated in Marina del Rey by

Hornblower Cruises. The Marina del Rey service is subsidized by Los Angeles County — however, the city of Newport Beach would be entirely responsible for the costs of operating a Newport Harbor water taxi.

Aside from determining the feasibility of the service, the Economic Development Committee is examining how water taxis would be run in Newport Harbor. That includes determining a route, possibly with several pick-up and drop-off locations around the harbor. At this point, however, having multiple locations may be prohibitively expensive, Luehrs said.

The water taxi might alternatively provide on-call service. Pedestrians would be able to have the water taxi pick them up and drop them off from restaurants, public docks and other areas around the harbor.

The committee plans to presents its findings and recommendations to the city council within the next few months.

Log Marine Newspaper Article on NB Water Taxis, August 7, 2009









Channel 9 News Feature/Interview Clips on Possible Newport Beach Water Taxis 8/8/09

Estimating Market Demand By Analyzing Comparable Water Taxi System Examples

Estimating market demand of passenger levels for a possible Newport Harbor water taxi service using traditional methods of market demand projection such as "market capture share" and other forecasting techniques requires an extensive quantitative demand survey.

Developing and conducting such a survey to professionally-credible levels of accuracy and reliability is beyond the scope/level of detail/timing of this study's charge and the skills and availability of its citizen volunteer/ City staff Committee.

If the City decides to proceed with a water taxi system and requests proposals from potential private-sector operators of the system, these prospective operators will conduct their own market and operational feasibility due-diligence analyses of the system objectives, performance requirements and concepts in this Analysis and the City Request for Proposals .

These due diligence efforts and the potential operator responses to the RFP will determine the extent of market potential and feasibility of the system in the opinion of those serving the market, a true "proof of concept" from experienced operators considering a possible new venture in unique economic times.

However, one proven, generalized method of estimating market demand for a water taxi service/system in a particular region/market is to analyze the history and performance of one or more existing water taxi systems in that region and market which are considered generally comparable to a proposed system. (see Other Water Taxi Systems section of report)

Marina Del Rey Water Taxi System As Comparable Market Example

In this analysis, the Marina Del Rey Water Taxi service & system has been utilized as a market example considered generally "comparable" to Newport Beach because of its:

- multiple (7) service area stops on a loop route;
- distances between stops and across the main water body;
- use of public and private docks as stops;
- multiple vessels and vessel types;
- both loop routes and direct on-call service to any location with suitable dock/access;
- •on- dock agents to control loading/unloading, radio pickups/numbers or by-pass;
- flexibility to respond to known or unplanned usage demand peaks w/larger vessel;
- extensive use by both residents and visitors;
- use of remote public parking areas, shuttle busses, public walkway systems;
- accommodation of bicycles, strollers, wheelchairs (ADA accessibility)
- seasonal (summer) operation;
- experienced private operator under contract with public agency (County of L.A.)

The original County of L.A. 2006 estimate of a possible MDR water taxi system summer ridership was 8,000 to 10,000 people. Actual MDR ridership by years of operation to date:

2007 21,319 passengers 2008 24,354 passengers

2009 25,000 passengers (estimated- already surpassed this 9/1)

These numbers represent ticketed passengers riding at least one leg of the water taxi system.

The MDR water taxi system was extensively advertised and promoted in regional and national media, by the County and the MDR website and in other media and information at all of the 58 MDR lease parcels, including restaurants, bars, hotels, yacht clubs, marinas, yacht sales, shops, apartments and condos for many months before its startup in its current form in 2007. It continues to have extensive regional promotion.

Additional advance information was also distributed through Chambers of Commerce, hotels and other locations in surrounding Los Angeles, LAX, Santa Monica, Beverly Hills, and other communities. MDR water taxi management and operation, as well as new vessels and dock operations have been under a new operator in 2009.



Marina Del Rey Water Taxi System 2009

While useful as a working successful operational and system elements and characteristics example for comparison with a possible conceptual Newport Harbor water taxi system, the MDR Waterbus has distinct differences from the possible NB water taxi conceptual model in other areas:

- the 2009 operator/operation received a \$300,000 startup subsidy from LA County;
- passenger rates at \$1 are heavily subsidized through federal and regional transit
- there is no high-volume point-to-point demand like that covered by the Balboa Ferry
- the service areas and uses are within MDR and not like NB ocean beaches, etc.
- the MDR overall distances and travel time for a complete loop are shorter than NB
- there is a landside MDR shuttle bus system supplementing the waterside routes

Market Estimate Model for a Conceptual Newport Beach Water Taxi System

Based upon general comparability with the MDR estimates and actual passenger volumes, an estimate of similar initial and evolving ridership has been used for the conceptual Newport Beach Water Taxi system. (summer operation only)

Initial Operating Season	estimated range of 8,000 to 10,000 riders
Second Operating Season	estimated range of 15,000 to 20,000 riders
Third Operating Season	estimated range of 25,000+ riders

This is only a conceptual estimate of a market demand model for a possible Newport Harbor Water Taxi System based on an existing similar system. It is not an estimate of the market feasibility of such a system.

As noted earlier in this section, prospective water taxi operators would be expected to perform their own ridership, rate structure and revenue projections as part of their preproposal submittal due diligence efforts and use this information to demonstrate to the City the market parameters and assumptions which they would be using.

OTHER WATER TAXI SYSTEMS

Other Water Taxi Systems

An overview research effort into the characteristics of other harbor water taxi systems in California and the U.S. operating during Summer 2009 was conducted to determine the characteristics of, and potential applicability to, a potential Newport Beach water taxi system in terms of:

- markets served local, tourist/visitor, seasonal, commuter, pedestrians, bicyclists
- levels and types of demand- numbers of users, individuals, groups, charters, etc.
- route systems loop, point-to-point, on-demand, scheduled, flexible, hybrid
- **docking facilities** public, private (restaurant, bar, resort, hotel, etc.) , ADA-capable
- support services and facilities restrooms, parking, signage, dock agents, ADA
- financial characteristics- capital & operating costs, fees, revenues, subsidies
- management /operating system private operator for public agency, public transit
- linkages to other transport auto parking, bicycles, buses, shuttles, taxis, rail, air
- **contact systems** telephone, Internet, brochures, dock agents, signage
- flexibility ability to add service for peak periods/demand, change routes

On the basis of comparable seasonality and mixed local and tourism markets, as well as certain elements of their operation of potential interest to Newport Beach, five Southern California water taxi systems and one Florida water taxi system were selected for further review from over a dozen systems initially considered:

Southern California Water Taxi Systems

- Santa Barbara Harbor Water Taxi ("L'il Toot")
- Channel Islands Harbor Water Taxi
- Marina del Rey Waterbus
- Long Beach AuqaBus & AquaLink
- San Diego Water Taxi

South Florida Water Taxi System

• Fort Lauderdale Water Taxi

The general characteristics of the Southern California and Florida systems listed above are summarized in the chart at the end of this section.

Data summaries of selected systems are provided following Chart Y1, and **system information from brochures and Internet, and from press articles** is grouped, by system, in the Chart Y1 order, at the end of this Section of the report.

Other Southern California Harbor Water Taxi Systems-On Call Small Vessels/Shoreboats

Additional existing specialized water transportation/taxi/shoreboat systems such as the Catalina Island shoreboats (Avalon and Two Harbors/Coves) and the Newport Harbor yacht club shoreboats (NHYC, BYC) were also studied, as was the use of the Vessel Assist and

Tow/US towing and salvage vessels as a shoreboat service during the pre-Ensenada Race week, a unique special-event utilization of marine industry vessels as shoreboats.

The Catalina Island on-call shoreboat systems using 30'+/- vessels with 10-20 passenger capacities have proven very effective and efficient for the public boater market, small areas and variable distances within which they travel.

They represent a useful model for possible on-call public water-taxi/shoreboat services in the Newport Harbor anchorage and mooring areas, as well as for NB private docks and commercial docks with limited berthing lengths and restricted waterways/approaches.

Information on these systems is included in the systems information grouped at the end of this section.

Summary of Conclusions From Analysis of Other Relevant Water Taxi Systems

Other existing water taxi systems reviewed in this analysis with characteristics relevant to a potential Newport Beach water taxi system had:

- both multiple-stop regular routes and on-call random routes, as well as flexibility to vary routes, pickups and timing based upon variable demand, vessel types;
- excellent communication of passenger demand/location through, telephone, internet, and radio communications, on-dock agents (MDR) able to communicate in advance a stop-by-stop pickup or by-pass condition to underway/reserve vessels;
- in the Marina Del Rey, Ft. Lauderdale and Catalina Island Long Beach examples and models most similar to the anticipated NB WT system needs, a variety of custom-built vessel sizes/capacities including small, medium and large which could meet variable passenger demand volumes, dock sizes and accessibility;
- limitations on speeds/wakes in harbors which required continuous routing and demand information from a dispatching system to maintain schedules, time-efficient and human-controlled loading and unloading procedures, appropriate low-wake vessel hull designs and professionally-experienced, local-knowledge captains;
- management and operations by private-sector companies under various forms of multi-year contracts and leases with public jurisdictions requiring percentage fees;
- financial subsidies from public or private sources, as well as multiple supplemental operating revenue sources beyond fares to support multi-vessel operations;
- access to both publicly-and-privately-controlled docks as stops in their systems which had land pedestrian access, and in some cases land transportation, to and from major waterfront and inland commercial activity and recreation centers.

SOUTHERN CALIFORNIA &	SOUTH	FLORIDA	NIA & SOUTH FLORIDA HARBOR WATER TAXI/FERRY SYSTEMS -SUMMER 2009	TER TAX	I/FERRY	SYSTE	MS -SU	MMER 2	600	
AREAS/HARBORS										
SOUTHERN CALIFORNIA	Existing	Multi-Stop	Point-to-Point	On-Call	Seasonal	Annual	Stops	Operator	Subsidy	Vessels
Santa Barbara Harbor	×	×	×	×	×	×	7	private	ou	-
Channel Islands Harbor	×	×		×	×		9	private	yes	7
Marina Del Rey	×	×	×	×	×		7	private	yes	2
Long Beach Harbor/ ABay										
Downtown/Rainbow Harbor WT	×	×		X		×	9	private	yes	1
Alamitos Bay Shuttle	×	×		X		×	3	private	yes	1
Newport Harbor (Balboa Ferry)	×		×		X	×	2	private	ou	3
San Diego Bay	×	×	×	X		×	10	private	yes	2
SOUTH FLORIDA										
Fort Lauderdale Area	×	×	×	X	×	×	11	private	yes	8
Notes:	1. Ft. Lau	derdale syst	1. Ft. Lauderdale system is "green"-operates all vessels on bio-diesel and 2 on diesel- electric power	perates al	l vessels o	n bio-die	sel and	2 on diese	I- electric	power
	2. Most s	stems are f	2. Most systems are flexible, able to shift from multi-stop to point-to point based on actual demand	hift from r	nulti-stop	to point-	to point	based on	actual der	nand
	3. Marina	Del Rey and	3. Marina Del Rey and Ft. Lauderdale route systems are the most similar to NB Harbor characteristics	route syst	tems are tl	ne most	similar t	o NB Harb	or charac	eristics
	4. Refer t	o detailed sy	4. Refer to detailed system information for schedules, routes, areas and use served, rates	on for sche	edules, ron	tes, area	s and us	se served,	rates	
	5.All syst	ems (includir	5.All systems (including NB Balboa Ferry offseason) offer group charters whwn vessels are available	erry offsea	son) offer	group ch	arters w	hwn vesse	els are av	ailable

SELECTED WATER TAXI SYSTEMS COMPARISON

WATER TAXI DATA SHEET-Santa Barbara

Jurisdiction Santa Barbara Harbor

Name of Boat or Service Santa Barbara Harbor Water Taxi-Lil' Toot

Operator & years Fred Hershman, 7th year

Contract/license License agreement with the City

Fee or subsidy& amount Operator pays \$50 per month or a percent of gross sales

whichever is greater.

Percentage fees:

1% of gross sales from the Water Taxi Service 1% of gross sales from shore boat service 10% of permitted merchandise sales 15% of permitted charter activities

Multi stop bus or

On demand Water taxi leaves Harbon

Water taxi leaves Harbor on 15 & 45 minutes after the hour Shore boat on call on demand. Charter services permitted

Water taxi leaves Stearns Wharf on hour and half hour

outside operating hours

Number of stops 2 stops, plus shore boat calls to docks, moorings, anchorage

Number of boats 1

Type of boats 1987 Crosby 26 foot diesel, converting next year to electric

Number of passengers 22

Hours/ days of Operation noon until 6:00 p.m., 6 days a week March thru November,

Closed Wednesdays. Week ends only December thru February. Charter & dinner cruises permitted outside normal operating hours. If no cruise may run later

Distance & time of travel 700 yards (10-12 minutes)

Fare (one way) \$4.00 adults

\$1.00 children under 12

Free for children under 2, military, blind and handicapped

Notes

Fred's secret of success is to make it clean, on time flexible and fun. He has a unique character boat, with distinctive whistle and produces bubbles from the stack. He tries to make it fun, particularly for the children.

The City is very supportive and works cooperatively with the operator. The City staff's position is "that the Water Taxi is a valuable transportation service between the harbor and wharf. There is an increasing need for a shoreboat service to transport mariners from the east of wharf mooring and anchorages areas."

It took 4-5 years to really build up the business. The water taxi part would pay the bills but the additional merchandising made it profitable.

Other revenue ideas: Sunset cruise of 1 hour.

Burials at sea Dinner cruise

Progressive dinners at restaurants

Scheduled tour bus stop

Operator has beer and wine license and authorized to sell liquor, food, beverages and merchandise. He credits the ability to sell these items as well as charter opportunities and dinner cruises as keys to his profitability.

Originally had \$5 round trip but found that people were using it as tour boat and they didn't get off at the other end. They now sell one way only tickets and ask people to disembark at the other end unless there are no people waiting.

Shore boat service very small part of income.

Offers bus tours to include boat ride on itinerary, very popular and pays well. Average bus holds 49 people so he is forced to split the group for boat tour.

Merchandise sales includes tee shirts, caps, sweat shirts, whistles

WATER TAXI DATA SHEET – Marina Del Rey

Jurisdiction Marina Del Rey- County of Los Angeles

Name of Boat or Service Marina Del Rey Waterbus

Operator Marina Del Rey Hornblower

Contract/license Contract with County

Fee or subsidy& amount Subsidy of \$300,000 summer 2009

Multi stops/by-pass Regular stops with on-dock staff for bypass

On demand

Number of stops 7 stops

Number of boats 5 boats

Trident Pontoon Boats Type of boats

Number of passengers 4 boats carry 24 people, 1 that carries 80 people

Hours/ days of Operation June 27 to September 1 (Fri, Sat, Sun)

> Friday 5 p.m. to midnight Saturday 11 a.m. to midnight Sundays 11 a.m. to 9 p.m. plus 4th of July 11 a.m. to midnight

plus Labor Day 11 a.m. to midnight

plus 4 Thursday concert nights 5 p.m. to midnight

Distance traveled

Fare (one way, round trip) \$1.00

Any fare categories (Children, Seniors, Time of day, annual

Pass, weekends versus

Week day)

Day pass \$5.00 Season pass for \$30.00

WATER TAXI DATA SHEET-Newport Harbor

Jurisdiction Newport Harbor

Name of Boat or Service Harbor Hopper

Operator & years Ralph & Penny Rodheim, summer of 1994

Contract/license/ with City None Fee or subsidy None

Multi stop bus / other Original bus stop model changed to on call

on demand

Number of stops Unlimited

Number of boats 1

Type of boats Vancouver type, diesel engine, center helm

Number of passengers 24 passengers

Hours/ days of Operation Saturday noon to midnight, Sunday noon to 9: p.m.

Monday noon to 6:00 p.m. Thursdays & Friday 6:00 p.m. until midnight, 6 days a week summer only

(one summer in operation)

Distance traveled Entire harbor, based at Balboa Boat Rentals

Approx. 2 ½ miles Mariners Mile to M street

Fare (one way, round trip) \$12 all day trips, \$6 one hour excursions

Any fare categories Unknown

Notes: Operated one summer only-1994. Unable to generate

enough revenue. Catered largely to bars and restaurants.

WATER TAXI DATA SHEET-Newport Harbor

Jurisdiction Newport Harbor

Name of Boat or Service Balboa Island Ferry

Operator Beek family (90 years)

Contract/license Contract with City (+CA PUC Permit)

Fee or subsidy& amount Contractor pays 5% of gross revenues and rents street

Ends where ferry lands and fee for docks

Point-to Point 2 stops, one on Balboa Island, one on Balboa Peninsula

Number of stops 2 stops Number of boats 3 boats

Type of boats Converted flat bottom barge with sloping front and rear

carries 3 cars, bikes, mopeds, motorcycles and passengers

Number of passengers 98 people without cars, 75 people with three cars

Hours/days of Operation 6:00 a.m. to 2:00 a.m. 365 days/year

Distance traveled 300 yards one way across main channel- 3 minute ride

Fare (one way) Car & driver \$2.00

Motorcycles & mopeds \$1.50 (passengers extra)

Bicycles

Adult \$1.25 Child \$0.75

Pedestrian & vehicle passengers

Adult \$1.00

Children 5-11 \$0.50

Children under 5 Free

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About Us

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Lil' Toot - - a Santa Barbara tradition since 2003. The cute little, yellow tug that plies Santa Barbara Harbor each day has put a smile on over 225,000 bright shiny faces since 2003.

Voted best boat ride in Santa Barbara by elementary school kids and teachers.

From the Harbor to the Wharf - We'll take you from the harbor to the world-famous Sterns Wharf. From souvenir shopping and dining, to whale watching, fishing and even wine tasting, there's always something happening for the whole family at the Wharf.

From the Wharf to the Harbor - Take Lil' Toot from Stearns Wharf to the harbor where you'll find great restaurants, incredible scenery, the Maritime Museum, and more. Stroll out on the breakwater and take in a magnificent sunset, then enjoy the freshest seafood available in one of our world-class restaurants.

...and Beyond! Need a ride to or from your boat along the Water Taxi route? We'll take you from the Wharf or the harbor to your boat...and back again. Call us on VHF channel 12 or call 805/896-6900 to arrange a pick-up.



THE BOAT

Lil' Toot runs on non-polluting bio-diesel. The exhaust smells of French fries or donuts. Bio-diesel is as bio-degradable as sugar and less toxic than table salt. Bio-diesel is made from 80-90% vegetable oil and 10-20% alcohol.

Lil' Toot was made in Osterville, Massachusetts in 1987, by the Crosby Tug Company. Made of fiberglass. Comfortable seating for 22 passengers. 25 adult life preservers and 21 child-sized preservers are carried for your safety. Lil' Toot is certified by the U.S. Coast Guard and is inspected by the U.S.C.G. once a year for your safety.

Lil' Toot carries 16 mile radar, depthsounder, VHF radio, steam whistle, CD player, PA system, fixed and portable fire suppression systems, multiple bilge pumps and all safety equipment required.

THE STAFF

The captains are all U.S. Coast Guard licensed 100 ton Captains with over 30-years experience each. Captain Fred is an ordained minister and California State Licensed Cremated Remains Disposer. Crew members are friendly, helpful and experienced.

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Phone: 805/896-6900 - E-mail: captfred@sbwatertaxi.com
Operating Hours:
Winter 12:00 pm to Sunset
Summer 12:00 pm to 6:00 pm
*Trips are weather permitting

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APRIL 2009



HARBOR CRUISES

Date **Hours of Service** Water Taxi Stops - See Map Below

4/01 Wednesday	No Service
4/02 Thursday	No Service
4/03 Friday	No Service
,	
4/04 Saturday	12 Noon – 6 PM
4/05 Sunday	12 Noon - 6 PM
January	12110011 01111
4/06 Monday	No Service
4/07 Tuesday	No Service
4/08 Wednesday	No Service
4/09 Thursday	No Service
	No Service
4/10 Friday	No Service
4/11 Saturday	12 Noon – 6 PM
4/11 Saturday 4/12 Sunday	12 Noon – 6 PM
4/12 Sunday	12 NOON - 6 PW
4/13 Monday	No Service
4/14 Tuesday	No Service
4/14 Tuesday 4/15 Wednesday	No Service
	110 0011100
4/16 Thursday	No Service
4/17 Friday	No Service
4/18 Saturday	12 Noon – 6 PM
	12 Noon – 6 PM
4/19 Sunday	12 NOON - 6 PW
4/20 Monday	No Service
4/21 Tuesday	No Service
4/21 Tuesday 4/22 Wednesday	No Service
	No Service
4/23 Thursday	110 0011100
4/24 Friday	No Service
1105 0 1 1	12 Noon – 6 PM
4/25 Saturday	
4/26 Sunday	12 Noon – 6 PM
4/27 Monday	No Service
4/28 Tuesday	No Service
4/29 Wednesday	No Service
4/30 T	No Service

(1) HARBOR LANDING

A Shore Thing - Salon & Day Spa Channel Islands Design Harbor Mart Deli & Fine Wines Hair & Body Dimensions

Edge Fitness Club Fisherman's House Fisherman's House Sushi Bar The Lookout Bar & Grill

(2) PENINSULA PARK

Anacapa Isle Marina Casa Sirena Hotel

Hampton Inn

Lobster Trap Restaurant Peninsula Yacht Marina

(3) MARINE EMPORIUM LANDING

Captain Hook's Sportfishing Channel Islands Kayak Center Channel Islands National Marine Sanctuary Coast Chandlery

Corinthian Yacht & Ship Brokers Farmers' Market, Every Sunday - Rain or Shine Goin' Places Island Packers Latitude 34 Deli

Mariner's Mail Stop Moqueca Brazilian Cuisine Pacific Scuba Scarlett Belle Smuggler's Cove Sunfish Dive Boat

Whale's Tail Restaurant

(4) WEST BANK DOCK

Charlotte Schmidt **Harborview Park** Yacht Sales

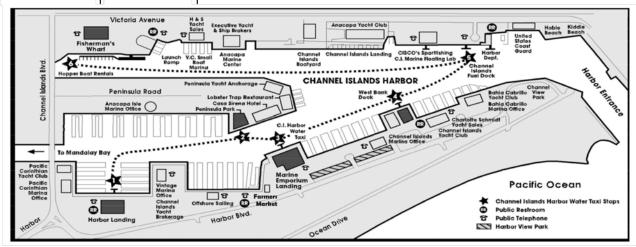
(5) CHANNEL ISLANDS HARBOR FUEL DOCK (6) FISHERMAN'S WHARF

Cellular Phones & Pagers Chabad of Oxnard H.C. Seafood & Co. Forever Fit Pilates Studio

Hopper Boat Rentals Marine Education Center Maritime Museum Oxnard Psychic Renaissance Hair Design

Smokin' BBQ Spudnuts Studio Gallery Fred Vance Farmers Insurance Wharf Dock & Shop

Harbor Cruise (Round-trip): Adults \$8.00, Seniors/Medicare/Disabled (62 yrs. & over, Medicare Card or ADA Card) Half Price Children Ages 12 & Under \$4.00 $\,_{\lambda}$ Harbor Transit: \$4.00 Long Hop, \$2.00 Short Hop









FARE

\$1.00 per person, one way





NO SMOKING OR PETS



DISABLED ACCESS

To accommodate our disabled community, ADA accessible ramps are located at Burton Chace Park, Waterfront Walk, Marina "Mother's" Beach, Dolphin Marina, Esprit 1 and Marina Harbor.

WaterBus attendants will arrange for land taxi service for passengers needing special assistance to any WaterBus boarding stop for the \$1.00 fare.

Don Knabe Los Angeles County Supervisor





For further information please visit: marinadelrey.lacounty.gov

FOR A FUN WEEKEND!

RIDE THE MARINA DEL REY WaterBus

Park your car and take our **WaterBus** for a unique water's-eye view of Marina del Rey. Seven boarding stops throughout the Marina offer opportunities to shop, dine and recreate in one of the most beautiful Southern California residential and tourist areas. Bikes and strollers welcome on board.

On-Call Pick-Up

At designated stops 11 through 7

(310) 628-3219





LOCATION: HOME / ABOUT US / AQUABUS & AQUALINK

AQUABUS & AQUALINK

AquaBus

Water Shuttle Within Long Beach Harbor

On your next trip to Long Beach, be sure to catch a ride on the AquaBus, a 40-foot water taxi, offering magnificent ocean views and a unique perspective of Long Beach. For a minimal charge the AquaBus travels to Catalina Landing, Queen Mary, West Coast Hotel, the Aquarium of the Pacific, Pine Avenue Circle and Shoreline Village.

Enjoy breathtaking views as you cruise Rainbow Harbor and Queensway Bay.



RESERVATIONS



AquaLink

High-Speed Shuttle Between Long Beach Harbor and Alamitos Bay

AquaLink, a 60-foot catamaran, carries up to 75 passengers to the best of Long Beach's waterfront. For a minimal charge, the Catalina Express crew will take you on a high-speed adventure from downtown's waterfront, to Belmont Shore and on to Alamitos Bay Landing. AquaLink stops at the Catalina Express dock near the Queen Mary, the Aquarium of the Pacific at dock #4 and Alamitos Bay Landing.

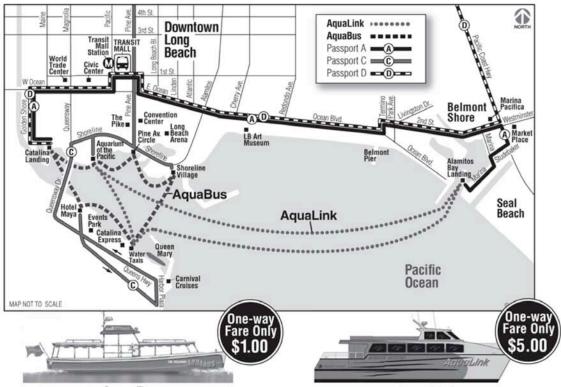
Long Beach Transit and Catalina Express have formed a unique partnership to operate friendly and fun water shuttle service to all of these exciting destinations. Both boats are available for group charters; a great idea for company parties, corporate meetings, or family events.

For more information, please call our Group Services Department at:

(800) 481-3470 Ext. 4

Visit the Long Beach Transit for current schedules, fares and maps:

Long Beach Transit - http://www.lbtransit.com



AquaBus

Open-air shuttle taxi serving Queensway Bay

SUMMER SCHEDULE: May 23 - Sept. 12, 2009 Daily Service

SHADED TIMES FOR FRIDAY & SATURDAY ONLY Effective June 26 - Aug. 29, 2009

QUEEN MARY/ CATALINA EXPRESS	HOTEL MAYA	CATALINA LANDING	AQUARIUM Dock 4	PINE AVE. CIRCLE Dock 7	SHORELINE VILLAGE Parkers Dock	
11:00am	11:05	11:15	11:30	11:35	11:40	
11:50	11:55	12:15pm	12:30	12:35	12:40	
12:20	12:25	12:45	1:00	1:05	1:10	
12:50	12:55	1:15	1:30	1:35	1:40	
1:20	1:25	1:45	2:00	2:05	2:10	
1:50	1:55	2:15	2:30	2:35	2:40	
2:20	2:25	2:45	3:00	3:05	3:10	
2:50	2:55	3:15	3:30	3:35	3:40	
3:20	3:25	3:45	4:00	4:05	4:10	
3:50	3:55	4:15	4:30	4:35	4:40	
4:20	4:25	4:45	5:00	5:05	5:10	
4:50	4:55	5:15	5:30	5:35	5:40	
5:20	5:25	5:45	6:00	6:05	6:10	
5:50	5:55	6:00*				
6:20	6:25	6:45	7:00	7:05	7:10	
7:20	7:25	7:45	8:00	8:05	8:10	

AguaLink

Colorful catamaran commutes the coastline

SUMMER SCHEDULE: May 23 - Sept. 12, 2009 Daily Service

SHADED TIMES FOR FRIDAY & SATURDAY ONLY Effective June 26 - Aug. 29, 2009

QUEEN MARY	AQUARIUM Dock 4	ALAMITOS BAY LANDING Not wheelchair accessible
11:00 am	11:20	12:00 pm
12:30	1:10	1:50
2:20	2:45	3:25
3:55	4:25	5:05
5:35	6:00 *	6:40
7:10	7:50	8:30
9:00	9:20	10:00
10:30	10:40**	

^{*} End of service for this trip Sunday -Thursday- service does NOT continue to

The Water Taxi fare applies to all riders — there are no discounted fares. Children aged 2 and under ride free with paid fare. Transfers and bus passes may not be used for fare. The AquaLink can accomodate up to six bikes.

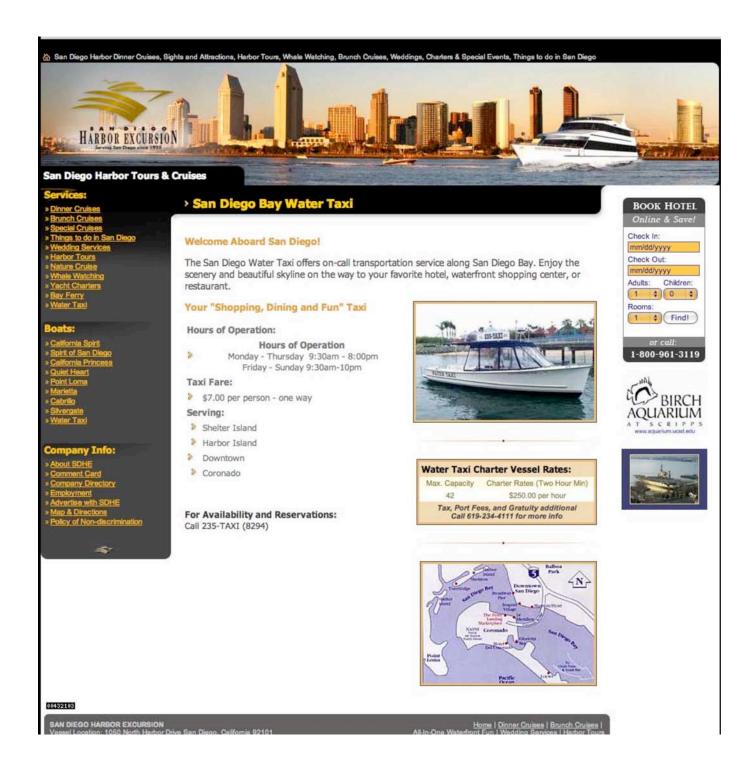
For more information, call Long Beach Transit at (562) 591-2301.

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Alamitos Bay.

**End of service for this trip Friday & Saturday—service does NOT continue to Alamitos Bay.

Light Type = AM Bold Type = PM



AVALON SHORE BOATS

The Avalon Shore Boats is a year-round water-taxi service providing transportation from vessels and points in Avalon Harbor to other vessesl and points or areas outside Avalon harbor such as Descanso Beach, or Hamilton Cove. Regular service to and from White's Landing is provided only during the summer season. Special charter rates are available and can be arranged in advance.



Water-taxi service in Avalon Harbor and surrounding areas. Land transportation also available. Ask for group and charter rates at (310) 510-0409 or (310) 510-2888 or VHF Radio Ch 9.

Rates:

\$4.75 per person, one way INSIDE Avalon Harbor

\$4.75 per person one way OUTSIDE Avalon Harbor

\$2.00 per child under 12 years old

Ticket Books:

Ticket book comes in a quantity of 10 and can be purchase from any Island Enterprises, Inc. ticket office.

\$36 per ticket book, Inside Avalon Harbor

\$36 per ticket book, Ouside Avalon Harbor

Annual Pass:

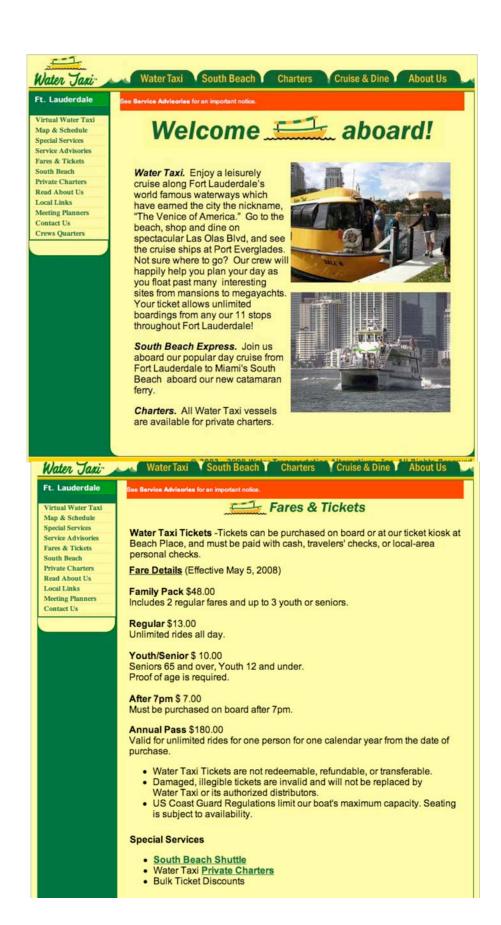
Annual passes are available for a one-time fee and has unlimited use of the water-taxi service for the year.

\$1,200 per pass

Hours of Operation:

For further information please contact a ticket agent at (310) 510-2888. Or you can reach a shore boat operator on VHF radio channel 9 on Avalon Harbor.

The Avalon Shore Boats and water-taxi service are licensed by the Public Utilities Commission, State of California. All vessels are USCG certified and annually inspected for your safety.



South Beach Service Area: The Water Taxi runs between Oakland Park Boulevard and Private Charters Southeast 17th Street along the Intracoastal waterway, and west along the New Read About Us River into downtown Fort Lauderdale as far as Las Olas Riverfront. Click on a Local Links stop in the list below or on the route map for schedule information. Meeting Planners Contact Us The Stops (New schedule effective May 22, 2009) Click on a stop name or Crews Quarters number for details. 1. Shooter's/Taverna Opa/Charley's Crab 2. Gallery ONE Doubletree Guest Suites 3. Seville Street (Beach) Intracoastal Waterway 4. Beach Place (Beach) 5. Bahia Mar/Bahia Cabana (Beach) 6. Hyatt Regency Pier 66 7. Convention Center A1A 8. 15th Street Fisheries 9. SE 9th Avenue 10. Downtowner Saloon 11. Las Olas Riverfront/Briny Pub Vessel capacities are regulated by the United States Coast Guard, and may not be exceeded. Boarding is first come, first E Sunrise Blvd. served with ticket holders boarding first. INBOUND Crew members are permitted to accept gratuities. If you enjoyed your trip, please consider leaving a tip to show your A1A appreciation. Seville St. E Broward Blvd. SW 2nd St. E Las Olas Blvd. 11 Cortez St. S Andrews Ave SE 3rd Ave. Hwy. (US-1) Federal SE 15th St. Map courtesy TRAVELHOST www.travelhost.com SE 17th St.

EXISTING & POTENTIAL DOCKS FOR A NEWPORT HARBOR WATER TAXI SYSTEM

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Newport Harbor Public & Private Docks As A Water Taxi System Framework

Newport Harbor is unique in Southern California harbors because of its ten public docks, dozens of private commercial docks and thousands of residential docks. This diverse and extensive public and private dock infrastructure has historically served:

- local and visitor recreational vessels and their tenders as passenger and gear dropoff and pickup locations,
- as shore access for tenders from moored and anchored homeported and visitor vessels,
- as guest docks for waterfront restaurants, a waterfront resort, a nautical museum, yacht clubs, and for yc shoreboats serving yc mooring areas,
- as emergency docks for use by harbor patrol vessels and landside emergency transport access,
- as docks for recreational fishing in the harbor
- as guest docks for private residences.

Ironically, this unique and extensive public and private dock infrastructure and its diverse uses has never been used for a public water transportation system serving Newport Harbor. (The cross-harbor Balboa Ferry public water transportation system uses its own purpose-built docks.)

This section of this feasibility study provides an overview of the potential for using this existing (and potential) dock infrastructure of public docks as the basic "core" of a water taxi route system (see Routes section of this report).

It also considers the potential for the owner-controlled use of private commercial docks, such as the guest docks at waterfront restaurants, for limited, on-call, access by a water taxi system, and the possibility of similar controlled on-call water taxi service to the harbor's yacht clubs, the Balboa Bay Club, Newport Harbor Nautical Museum and other waterfront activity and commercial destinations easily served by water transportation.

Expansion of the public dock system and the participation of publicly-accessible private commercial docks (see Private Docks in this report section) will be important to fill in gaps in public dock access to and from important waterfront activity centers along the Newport Harbor waterfront, particularly along the Mariners' Mile and Lido Marina Village waterfronts where no public docks or public access to the water exists at present.

The potential to use this supplemental form of transportation by water to reduce peakperiod traffic volumes and congestion levels for Balboa Peninsula, Mariner's Mile/PCH, and Balboa Island is particularly significant.

Newport Harbor Public Docks as Potential Water Taxi Stops

The existing public piers/docks in Newport Harbor (Figure 1x) can serve as the initial and primary docking infrastructure and drop-off/pickup/storage points for potential initial and expanded water taxi systems.

These public piers/docks provide general public access among important public uses (parking, bay and ocean beaches and piers, etc.) and commercial activity centers and attractions throughout Newport Harbor and in adjacent areas.

Use of these existing docks, after appropriate renovation, signing and use ordinance updating (fishing area designations, commercial use for public purposes, etc.) would enable both an immediate "proof of concept" test of an initial/expandable water taxi system using selected public docks (and possible participating private docks—see Private Docks section) and represents a cost-effective expanded/diversified use of an existing City public infrastructure asset.

It is important to note that the use of public docks also enables a potential water taxi system to provide a harbor-wide and harbor perimeter <u>loop and on-call</u> expansion of the existing <u>cross-harbor</u> access provided by the Balboa Ferry.

The water taxi system (loop, point-to-point and on-call) and the ferry (point-to point cross-channel) would thus work in cooperation, rather than competition, to provide a complete water-transportation system (see Routes section of report) around and across the harbor during the peak of the summer season.

In addition to the existing public docks and those planned for construction in 2010, other potential/hypothetical (beyond 2010) **new public docks are described in the New Public Docks section.** <u>Hypothetical new public docks (2010+)are for conceptual discussion purposes only and are not City proposals.</u>

The listings of public docks following this section includes all of the existing public docks, scheduled public dock expansions and proposed new public docks under City ownership and operation through 2010, described by:

- Location
- Uses/user groups (fishing use will be limited only to certain docks)
- Public restroom availability
- Public parking availability
- Nearby public amenities and commercial activity centers served
- Pedestrian access and ADA compliance

The existing 19th Street, 15th Street and Fernando Street Docks are scheduled for renovation and expansion in late 2009/early 2010, providing additional docking capacity which could be used by a water taxi system.

Also scheduled for new construction during 2010 is the Rhine Wharf Public Dock which will provide additional docking capacity which could also be used by a water taxi system. (See New Public Docks section)

Existing Newport Harbor Public Docks 2009

Existing Newport Harbor Public Docks, Areas & Amenities (Figure x1 numbers)

1. M Street Public Dock

- Location— this public dock is located at the street end of M Street and E. Balboa Blvd. making this the nearest public dock to the Entrance Channel.
- Use— the M Street dock is used for short term tie ups, passenger drop-off & pickup and by fishermen.
- Public restrooms are not available.
- Parking—public street parking is available in the residential area on E. Balboa Blvd.
- Nearby amenities— the surrounding area is residential and the beach / Wedge is within walking distance.
- Access— the dock is accessible from the street end. It is not ADA compliant.

2. Washington Street Public Dock

- Location— this public dock is located at the street end of Washington Street in the Balboa Village / Fun Zone.
- Use— the Washington Street dock is used heavily as a dinghy dock, short term tie ups, passenger drop off and pick up, fishing and as a vessel pumpout dock.
- Public restrooms are available on Washington St. and E. Bay Ave.
- Parking— public parking is available at nearby City lots on either side of Balboa Blvd, and metered parking.
- Nearby amenities—Balboa Village, Fun Zone and Balboa Pier, shopping, and Balboa beach.
- Access— the dock is accessible from the boardwalk at the end Washington Street. It is not ADA compliant.

3. Fernando Street Public Dock

- Location— this public dock is located at the street end of Fernando Street in a residential area.
- Use— the Fernando Street dock is heavily used as a dinghy dock, short term tie up, passenger drop off and pick up, fishing and as a vessel pumpout dock.
- Public Restrooms are not available.
- Parking—public street parking is available in the residential area.
- Nearby amenities— The Balboa Village and Balboa Dock are within walking distance.
- Access— the dock can be accessed from the street end. It is not ADA compliant.
- This dock will be expanded in the near future (2009/10) to accommodate more vessels and dingly tie-ups.

4. 15th Street Public Dock

- Location— this public dock is located at the street end of 15th Street adjacent to the American Legion.
- Use— the 15th Street dock is heavily used as a dinghy dock, short term tie up, passenger drop off and pick up, and for fishing.
- Public restrooms are not in the immediate area, but some are located across Balboa Blvd on the ocean beach on 15th St.
- Parking—public street parking and meter parking available.
- Nearby amenities— 15th Street beach and local shops.

- Access— the dock can be accessed from the street end. It is not ADA compliant.
- This dock will be expanded in the near future (2009/10) to accommodate more vessels and dinghy tie-ups.

5. 19th Street Public Dock

- Location— this public dock is located at the street end of 19th Street adjacent to the public beach and the entrance to the Rhine Channel which is largely commercial.
- Use— the 19th Street dock is heavily used as a dinghy dock, short term tie up, and passenger drop off and pick up. Fishing is currently allowed but will be prohibited in 2010 when the new dock extensions are installed.
- Public restrooms are located near the public parking lot on 19th.
- Parking—public street parking and meter parking available.
- Nearby amenities— Newport Dock, McFadden Square, restaurants and shopping amenities in short walking distance.
- Access— the dock can be accessed from the sidewalk and parking area. It is not ADA compliant.
- This dock will be expanded in the near future (2009/10) to accommodate more vessels and dingly tie-ups.

6. Coral Avenue Public Dock

- Location— this public dock is located at the street end of Coral Ave and South Bay Front on Balboa Island.
- Use— the dock is used for short term tie ups, passenger drop off and pick up and by fishermen
- Public restrooms are not available in the immediate area.
- Parking—public street parking is available in the residential area.
- Nearby amenities— the surrounding area is residential. The Balboa Island Ferry and Marine Avenue are a short distance on foot.
- Access— the dock is accessible from the boardwalk and street end. It is not ADA compliant.

7. Opal Avenue Public Dock

- Location— this pubic dock is located at the street end of Opal Ave and South Bay Front on Balboa Island.
- Use—the dock is used for short term tie ups, passenger drop off and pick up, and by fishermen.
- Public restrooms are available at on Agate at the Balboa Island Ferry.
- Parking—public street parking is available in the residential area.
- Nearby Amenities— the Balboa Island Ferry is adjacent to the public dock and provides access to the Balboa Village / Fun Zone, Balboa Dock and nearby beaches. Balboa Island has bay beaches and shopping on Agate Ave and Marine Ave.
- Access— the dock is accessible from the boardwalk and street end. It is not ADA compliant.

8. Emerald Avenue Public Dock

• Location— this public dock is located at the street end of Emerald Ave and North Bay Front on Balboa Island.

- Use— the dock is used for short-term tie ups, passenger drop off and pick up, and by fishermen.
- Public restrooms are not available in the immediate area.
- Parking—public street parking is available in the residential area.
- Nearby amenities— the Balboa Island Ferry is a short distance from this public dock and provides access to the Balboa Village / Fun Zone, Balboa Pier and nearby beaches. Balboa Island has bay beaches and shopping on Agate Ave and Marine Ave.
- Access— the dock is accessible from the boardwalk and street end. It is not ADA compliant.

9. Sapphire Avenue Public Dock

- Location— this public dock is located at the street end of Sapphire Ave and North Bay Front on Balboa Island.
- Use— the dock is used for short term tie ups, passenger drop off and pick up, and by fishermen.
- Public restrooms are not available in the immediate area.
- Parking—public street parking is available in the residential area.
- Nearby amenities— the Balboa Island Ferry is a short distance to the public dock and provides access to the Balboa Village / Fun Zone, Balboa Pier and nearby beaches. Balboa Island has bay beaches and shopping on Agate Ave and Marine Ave.
- Access— the dock is accessible from the boardwalk and street end. It is not ADA compliant.

10. Park Avenue Public Dock

- Location— this public dock is located at the street end of Park Ave on the East Bay Front of Little Balboa Island.
- Use— the dock is used for short term tie-ups, passenger drop off and pick up and by fishermen.
- Public restrooms are not available in the immediate area, but are located on Park Ave. and Marine Ave at the Fire Station.
- Parking—public street parking on Marine and in the residential areas.
- Nearby amenities— the Balboa Island Ferry is 1/3rd mile from this dock Balboa Island has bay beaches and shopping on Agate and Marine Ave's.
- Access— the dock is accessible from the boardwalk and street end. It is not ADA compliant

Future Public Docks Which Could Support a Water Taxi System

These docks include the existing public Balboa Yacht Basin docks, the ready-to-be-constructed (2010) Rhine Wharf Public Dock, and other City projects an City-owned/controlled sites for which no firm construction schedule (Marina Park) or use or design (Lower Castaways, Central Avenue, etc.) exists, but which would certainly occur beyond 2010.

11. Balboa Yacht Basin (w/City decision/minor access, signage changes)

- Existing City marina w/water taxi docking capability (by minor changes)
- Location—on Harbor Island Drive/north BI Channel
- Public restrooms are available on site.
- Parking—limited/contolled public parking available on site

- Nearby amenities-shops, marine supplies/services, restaurants, HR office.
- Access— partially ADA compliant

12. Rhine Wharf Public Guest Dock (construction in early 2010)

- Location— this dock will be located at the Rhine Wharf.
- Use— short term tie ups under 3 hours and passenger drop off and pick up, as well as a potential water taxi stop.
- Parking—public street parking and metered parking are available.
- Nearby amenities— Restaurants, shopping, marine-related businesses are within short walking distances located at Cannery Village, Lido Peninsula, Via Lido shops, Rhine Channel uses and Lido Marina Village areas.
- Access— accessible from the boardwalk/ ADA compliant.

13. Lower Castaways Site (beyond 2010)

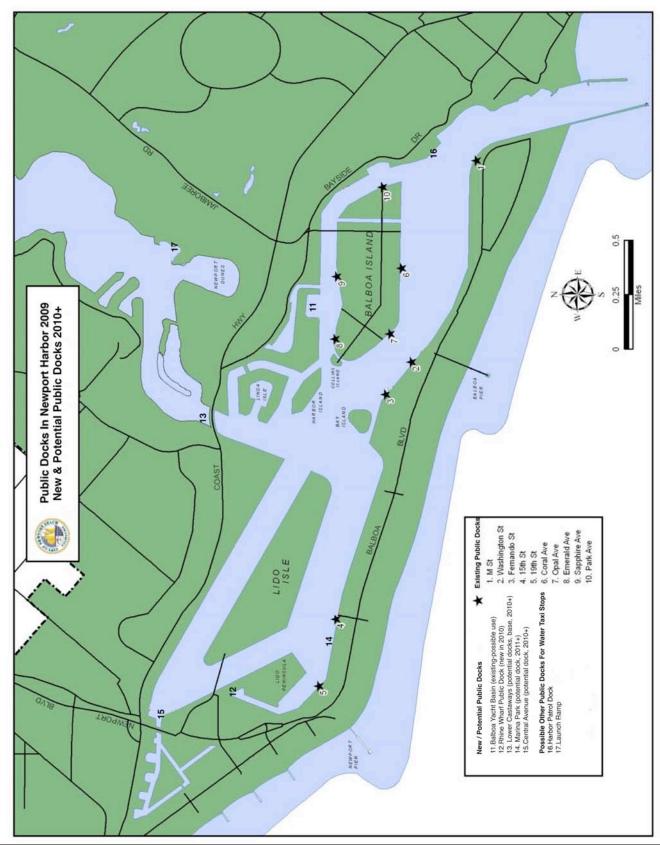
- Lower Castaways is a future City project site with water frontage and has the capacity to serve as a potential stop for water taxi service.
- Location—Lower Castaways Site is on the northeast corner of PCH and Dover Drive, west of the PCH bridge and Lower/Upper Bay channel
- Public restrooms would be available on site.
- Parking—public parking would be available on site
- Nearby amenities- shops, marine commercial and restaurants.
- Access— will be fully ADA compliant

14. Marina Park (beyond 2010)

- Marina Park is a designed City public marina and park/water access project with the capacity to serve as a potential stop for water taxi service.
- Location—located between the American Legion and 18th Street.
- Public restrooms will be available on site.
- Parking— public parking will be available on site as well as metered parking on streets and nearby City lots.
- Nearby amenities— public park, community center, small snack café, bay beaches, and short-term/visitor marina. McFadden Square, Newport Pier, and shops, services, and restaurants
- Access— Marina Park facilities & docks will be fully ADA compliant.

15. Central Avenue Street End Site (beyond 2010)

- The Central Avenue Street End Site is a potential future public dock site which could serve the Lido Village waterfrontage as a possible future stop for water taxi service.
- Location—adjacent to a public minipark between the south Newport Island Channel bulkhead and the end of Central Avenue, east of the Arches/Newport Blvd. bridge.
- Public restrooms not available on or near site.
- Parking— public street metered parking would be available near site and off street at (old) City Hall site.
- Nearby amenities- shops/ commercial uses, grocery/drug store and restaurants.
- Access—will be fully ADA compliant



Existing 2009 & Potential Additional Newport Harbor Public Docks 2010+

Existing & Future Private Commercial Docks as Potential Water Taxi Stops

Existing Waterfront Restaurant Guest "Dock and Dine" Docks

In the past, a large number of Newport Harbor waterfront restaurants provided privately owned and operated "guest docks" for waterborne restaurant patrons, generally requiring both restaurant and dock reservations in advance. Over the past decade+, a number of these docks evolved to full-time occupancy by private boats, thus eliminating "guest dock" capability.

This occurred particularly where the docks were controlled by a landlord other than the restaurant, and where changes in restaurant owner/operators eliminated guest dock usage for various reasons. A number of waterfront restaurants have, more recently, designated renovated existing docks or new docks to serve as guest docks.

These guest docks are used primarily by the small (30' and under) "bay boats" of Newport waterfront residents and guests, by rental boats and by dinghies and tenders of cruising private vessels visiting Newport Harbor.

Most of these docks are limited to dual 30'-35'+ side-tie docking, with the exception of the Cannery which has a 180' "long dock", used for both side-tie and stern-to "med-moor" docking of multiple boats of various lengths.

These Newport Harbor waterfront restaurants with existing working guest docks are listed in the "Dock & Dine" section of the City's new <u>Complete Cruising Guide to Newport Harbor</u> (2009 Ed.): (see excerpted Guide map pages below)

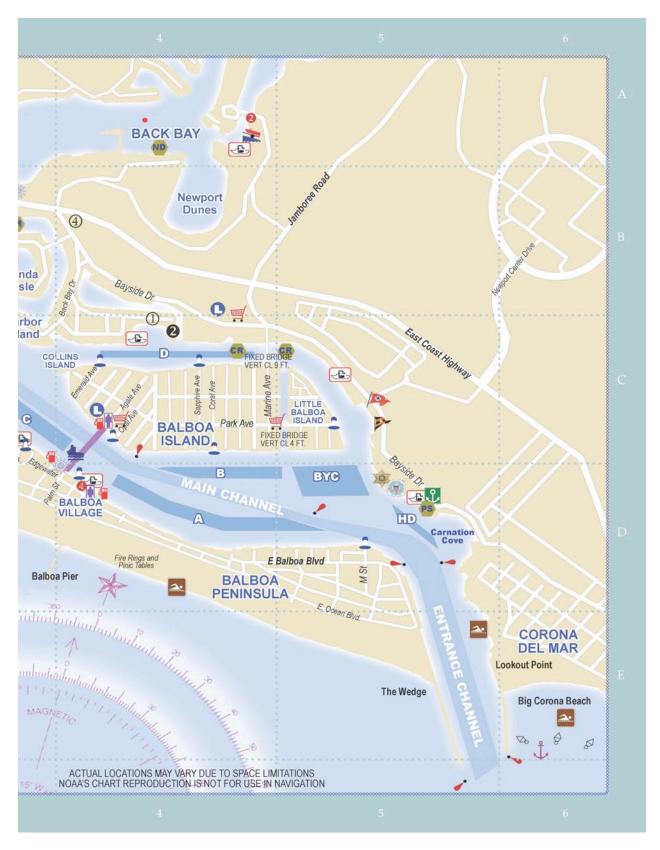
- 1. Balboa Bay Club/Resort (Duke's Place, First Cabin)(main channel, MM)
- 2. Back Bay Bistro (Upper Newport Bay, at launch ramp, Dunes)
- 3. Bluewater Grill (head of Rhine Channel)
- 4. Harborside Restaurant (main channel/fun zone/NHN museum)
- 5. The Cannery Restaurant (head of Rhine Channel)
- 6. The Dock Restaurant (head of Rhine Channel)
- 7. Villa Nova Restaurant (main channel, Mariner's Mile)
- 8. Woody's Wharf Restaurant (lower Rhine Channel)

Based upon successful U.S. and California experiences of waterfront restaurants with appropriately-sized-and-managed guest docks which also accommodate water taxi stops, it would appear that similar dual-use docks and operations could be accomplished in Newport Harbor, if properly and jointly structured and managed by the restaurant and water taxi operators.

This dual use of restaurant guest docks (of adequate size) could be attempted on an initial trial basis, after the main water taxi system is in place and operating and reservations/access systems are coordinated and controls in place.



Existing West Newport Harbor Public Docks & Private Guest Docks 2009



Existing East Harbor/Back Bay Public Docks & Private Guest Docks 2009

Existing & Potential Public-Access Docks in New Private Waterfront Projects

Other sources of existing and potential use of private commercial docks for potential water taxi system stops include new and potential waterfront commercial and mixed-use developments with marinas and docks and renovations/new construction of commercial marinas in Newport Harbor.

The City of Newport Beach General Plan, Coastal Land Use Plan, and the City's zoning, land use and planning regulations and harbor commercial permit review processes generally require specific docking facilities for short-term public use to be included in such developments.

These public-use docks are accessible to the general public from land and water, with the control of access and separation from a secured marina accomplished through design and operational management by the developer, designer and owner.

This public use would, by definition, also include use as a public-serving water taxi stop operated under City auspices for public water transportation and waterfront/coastal access purposes as noted in the General Plan and LCP/LUP.

Existing new and in-process/potential private waterfront developments with marinas which have, or would have, public-access docks with the capability to provide a public water-taxi system stop include: (see Figure x5)

A. Balboa Marina (existing-new in 2009)

Location—this marina is located at 201 East Coast Hwy near the Coast Highway Bridge.

Use— the marina has long term slip rentals and a publicly-accessible guest dock for short term tie ups (which could be used in part as a water taxi stop)

Public restrooms are not available.

Parking— onsite parking is included for restaurant patrons, marina offices and marina slip tenants. Drpoff/pickup areas are provided.

Nearby amenities— the Balboa Marina waterfront perimeter walk provides access to two waterfront restaurants (Sol, 333) and to nearby marine retail (West Marine) and general retail within walking distance.

Access— accessible to marina tenants, guests through the private marina, controlled by marina operator. The dock access is ADA compliant.

B. Newport Bay Marina (project approved, construction possible in 2010/11)

Location— this mixed-use dévelopment and marina will be located in the Rhine Channel between 21st and 26th Streets.

Use—marina includes long term rental slips and two large short-term guest docks for 10-12 boats to 30'(which could include a water taxi stop)

Public restrooms are not available.

Parking— the landside development will include parking for the commercial uses on that property. Nearby metered parking is available on streets and City parking lots.

Nearby amenities— the landside development of Newport Bay Marina will contain food service and other marine related services. The Newport Pier, McFadden Square and restaurants and shops are short walking distances.

Access— the dock will be accessible from the public sidewalks and a public walkway through the upland portion of the Newport Bay Marina. The marina will be ADA compliant.

C. Lido Marina Village (future mixed-use/marina rebuild, possible public dock)

This mixed use and marina development, proposed by several different owners over the last decade, may be rebuilt in the post-2010 period and will be required to have public-access docks and a possible water taxi stop location in the future. It currently has extensive public pedestrian access, parking and waterfront commercial /yacht brokerage and charter and restaurant uses, and a vessel waste pumpout facility/dock.

Other Potential Private Waterfront Commercial/Marina/Water Taxi Stops

- Ardell Site & Marina (future public-use dock as at Newport Bay Marina)
- Balboa Bay Club & Resort (on-call water taxi use of existing guest dock)
- OCC Complex (on-call water taxi use of available dock as desired)
- **Newport Sea Base** (on-call water taxi use of available dock as desired)
- **Newport Aquatic Center** (on-call water taxi use of dock as desired)
- **Newport Dunes Resort** (possible stop for point-to-point route connecting with NDR remote parking area serving Lower Newport Bay WT system)
- Other New/Existing Waterfront Developments With Docks

WATER TAXI VESSEL TYPES

Possible Newport Harbor Water Taxi Vessel Types and Uses

Overview of Vessel Types, Sizes and Capacities For a Newport Harbor Water Taxi Service

Background research was performed during this conceptual feasibility analysis to determine what types of vessels are currently most commonly utilized in California and U.S. water taxi services and thus might be suitable and available for use in a potential Newport Harbor water taxi service based on this experience in comparable water taxi locations/services.

The larger NB-comparable-example water taxi fleets (Marina Del Rey, Ft. Lauderdale) with multiple routes and vessels have two basic vessel sizes/capacities (number evolves w/need):

Basic Service Water Taxi Vessel (loop routes) 18-28 passengers, 30'-40', 2-4vessels Peak Use Waterbus Vessel (loop & p-t-p routes) 30-90 passengers, 50'-70', 1+ vessels

Because of the large number of smaller private docks, including many with limited navigational accessibility, in Newport Harbor which could potentially be served by an "on-call" water taxi capability, a third category of vessels should be considered:

Small Water Taxi Vessel ("on-call" routes) 8-12 passengers, 18'-25', 2+ vessels

The City and other agencies (USCG, etc.) would have the responsibility to require, and to determine operator conformance, that the operator-proposed vessels are:

- of an approved and proven U.S.-certified design for WT passenger service
- equipped with all necessary navigation, safety and communication gear
- compatible with potential Newport Harbor docks/stops and ADA access
- suitable in size and capacity for the intended operations of the WT system
- sufficient in number/type to meet the systems service level requirements
- operationally reliable, cost-effective for NB WT market, routes, speed, uses

Additionally, in consideration of other Newport Harbor policies such as improving water and air quality, avoiding water pollution, etc., the City may want to consider offering preference or incentives to prospective operators with "green" vessels/fleets with proven and reliable technologies.

These technologies could include advanced battery electric power, fuel cell electric power, solar charging/power, biodiesel or other green fuels, or hybrid combinations of these technologies or other proven technologies.

Examples of the various Southern California water taxi system vessels, and those used in the Ft. Lauderdale WT fleet, are shown on the following pages of this section, and examples of electric-power/ other-power small vessels for "on-call" service in tight areas follow.

The selection, purchase/lease/transfer and use of water taxi vessels forming a future Newport Harbor water taxi fleet are the responsibility of a City-selected private operator.



Marina Del Rey Water Taxi



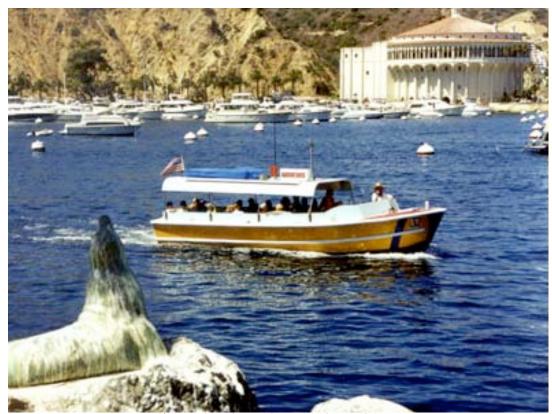
Long Beach Harbor Water Taxi



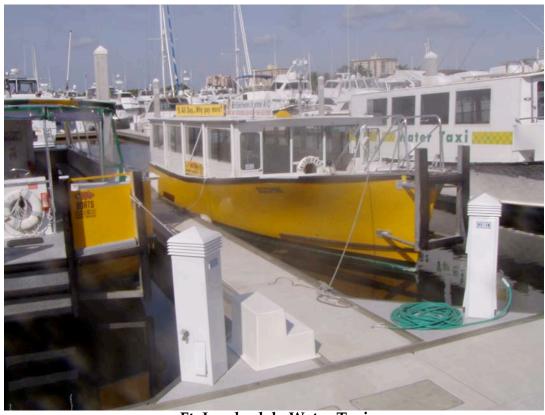
Santa Barbara Harbor Water Taxi



San Diego Harbor Water Taxi



Catalina Island Avalon Harbor Shore Boat



Ft. Lauderdale Water Taxi



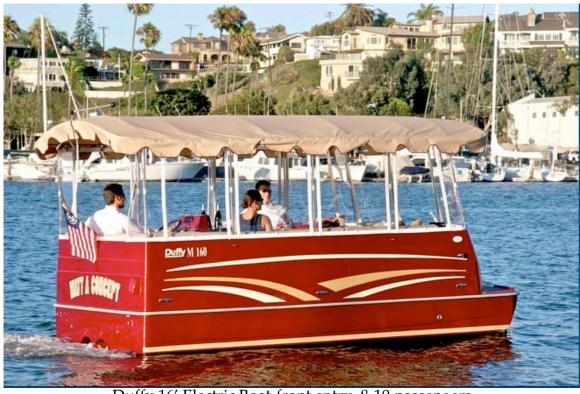
Long Beach Harbor Large Fast Waterbus (Point-to-Point Route)



Ft. Lauderdale Large Slow Waterbus (Loop Routes)



Duffy 21' Electric Boat-side entry 10-12 passengers



Duffy 16' Electric Boat-front entry 8-10 passengers



Electracraft 21' Electric Boat–front entry 10 passengers



Lear 20' Electric Boat –side entry 11 passengers

Other International Water Taxi Examples



Vancouver Harbor/ Granville Island Water Taxi, Canada



Amsterdam Canals Water Taxi, Holland



Seine River Water Taxi, Paris, France



Sydney Harbor Water Taxi, Australia



Venice Water Taxi ("Vaporetto Deluxe") , Italy



Inner Harbor Water Taxi, Baltimore, MD USA

POTENTIAL ROUTES/STOPS/AREAS AND SERVICE TYPES

Linking Newport Harbor Origins / Destinations and Docks By a Water Taxi Route System

A Short History of Water Transportation In Newport Harbor

The basic concept of any urban transportation system on land is to provide a network of convenient and safe access routes to, and circulation among, various uses and activity areas within the community which they serve, as well as the additional visitors and tourists arriving to enjoy the amenities of any coastal and bay-situated waterfront community such as Newport Beach. Topography and natural features such as mountains, deserts, rivers, lakes and harbors (such as Newport Harbor) create gaps in this land-based circulation network-a "water gap" in the case of Newport Beach.

These gaps create additional traffic volumes and congestion on the portions of the circulation network surrounding the gaps, as illustrated by the increased traffic volumes and congestion and time delays experienced along Pacific Coast Highway along the inland side of the harbor and Newport Boulevard leading to, and on, the Balboa Peninsula, particularly during summer peak tourism season.

With most of its waterfront residential areas, the majority of its waterfront commercial, restaurant, and resort areas, as well as its primary water-tourism uses and amenity areas such as beaches, sportfishing centers, rental boats, etc. located along these two primary vehicular routes and waterfronts bordering Newport Harbor, this area of Newport Beach is often continuously "gridlocked" each day for the three months of summer.

Historically, the first (and to date, the only) effort to get people and vehicles across the Newport Harbor water gap between the Peninsula and the "mainland" Newport waterfronts is the Balboa Ferry. The ferry is also the only cross-harbor water transportation for the increasing number of knowledgeable locals and visitors who park their vehicles around the harbor perimeter to become pedestrians and bicyclists to "get to the other side" of the harbor.

The current (1953 vintage) three-vessel ferry fleet carries thousands of pedestrians, bicycles, dogs, surfboards, motorcycles cars, strollers, trucks and cars across the harbor each week during the peak summer season, totaling an estimated 35,000-40,000 persons per year.

This unique 90-year-old ferry system has unfailingly provided THE ONLY method by which the general public can cross the harbor between the Balboa Peninsula/Newport Boulevard and Balboa Island/Pacific Coast Highway near the midpoint of the harbor's 3-mile length.

As a result, lengthy waits for greater numbers of people and vehicles crossing by ferry have increased over the years, attesting to the utility and popularity of this sole means of crossing the Newport Harbor "water gap" between origins and destinations on each side and around the perimeter of the harbor.

No increase in ferry size or numbers of vessels is presently planned by its owners, so the present capacity and cycle times will remain in the face of increasing demand for water transportation in, around and across Newport Harbor.

As noted in the preceding Docks section of this report, Newport Harbor has over 40 existing and potentially usable public and private docks within close proximity to the major waterfront/near-waterfront community and tourism commercial, dining, and recreation "destination" areas of Newport Beach which could serve as potential water taxi stops as part of a harbor-wide water taxi route system, as noted in the following analysis.

Waterfront Activity Centers Destinations/Docks for a Potential NB Water Taxi System

The Newport Harbor waterfront and near-waterfront uses and activity areas which are the potential destination areas for a water taxi route system serving the harbor are listed below, along with the nearest public and/or private docks which could serve these areas. These relationships are shown in the **Service Areas/Destinations & Related Docks** diagram below.

Harbor Primary & Secondary Destination Areas & Water Taxi Stops/Docks

Primary Destination Areas (docks providing access)

Mariners Mile (no public docks; private docks at Villa Nova, BBC, NSB, OCC)

Lido Marina Village/Peninsula/Head of Rhine/Cannery Village (Rhine Wharf dock)

Lower Rhine/Newport Pier Area/Ocean Beaches (19th/15th St. docks, NM private dock)

Balboa Island Marine Avenue / Bayside Village / BI Beaches (Park, Coral, Sapphire docks)

Balboa Village/Pier/Fun Zone/Flyer/ Museum/Sportfishing (Ferry, Washington St dks)

Dunes Resort/Back Bay Bistro/Launch Ramp (DR,BBB, LR docks)

Peninsula Public Parking Areas (19th St dock, Ferry, Washington St. dock)

Secondary Destination Areas (docks providing access)

Moorings (any public dock)

Anchorages (any public dock)

Yacht Clubs (any public dock, all yc docks)

Marinas (marina guest docks)

Harbormaster (harbormaster guest dock)

Harbor Resources (Balboa Yacht Basin public dock/HR dock)

Waterfront / Water-Accessible Residences (private docks as permitted by resident)

Harbor Beaches (Balboa Island public docks, Harbormaster guest dock,)

Ocean Beaches (N St Dock, any Balboa Ferry docks)

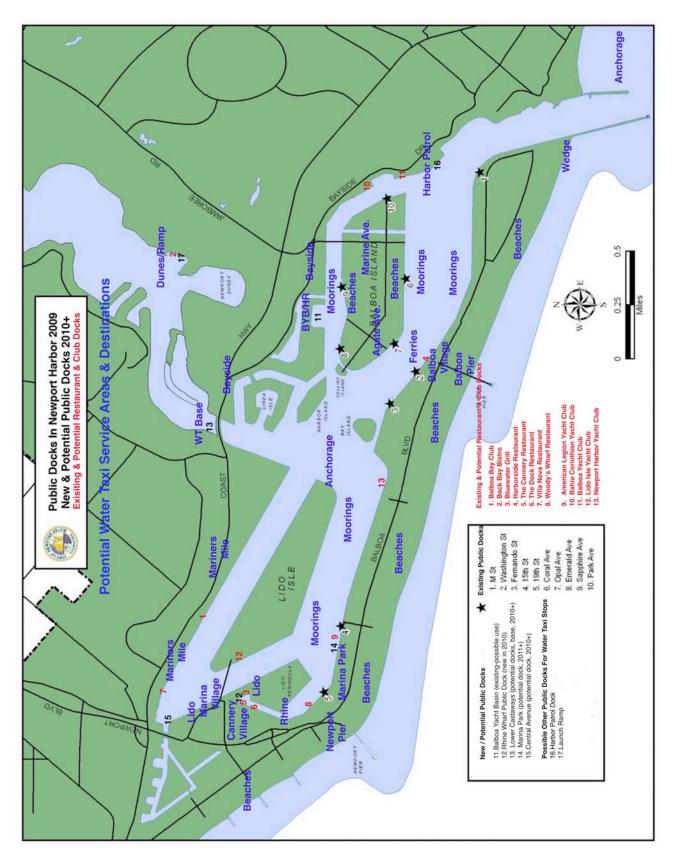
Boat / Kayak Rentals (nearest public dock)

Newport Aquatic Center (NAC dock)

Newport Sea Base (NSB dock)

Collegiate Sailing & Rowing Center (CSRC dock)

Remote Parking Areas (DR dock, other docks in proximity to RPA's as created)



Service Areas/Destinations & Related Docks

Water Taxi Route/System Types

Typically, water taxi routes and system types are based upon the numbers and types of stops on the route, the configuration of the water taxi water area, and the operating modes and flexibility desired by the system operator.

Route and system types generally fall into three categories or a mix of two or three types.:

1. a "loop" route system which connects several stops/docks around a large or complex water area or waterways system and generally has two or more vessels circulating in opposite directions around the loop simultaneously.

Examples of this type of system are Marina Del Rey and Ft. Lauderdale, with MDR running on a flexible "every few minutes" schedule and Ft. Lauderdale running on a published time schedule. (see Other Water Taxi Systems section of this report)

Generally these systems use multiple, high capacity 30+/--60+/- passenger vessels and have dock agents and communications which enable them to modify routes to skip empty stops, add vessels at peak periods, and retain some flexibility of service.

2. a "point-to-point" route system which connects two or three stops/docks on opposite sides or ends of a water area or connecting two water areas and may have a single vessel making round trips or multiple vessels making opposite-directions trips at the same, or staggered, times.

Examples of this type of system are the Balboa Ferry, with flexible "every few minutes" schedules and the Long Beach Waterlink and the Santa Barbara Water Taxi, with published time schedules. (see Other Water Taxi Systems section of this report)

These systems have are generally make the "round trip" if one of the stops serves as a base. Like the loop system, these p-t-p systems us high capacity 30+/--60+/-passenger vessels and have dock agents and communications which enable them to add vessels at peak periods, and retain some flexibility of service scheduling.

3. an "on-call" system which has no fixed route system other than an effective service radius due to speed and type of vessel, type and size of water areas, and number and type of potential destinations. By definition, they are an "on-call", random schedule service operating from one or more bases, as well as underway.

Examples of this type of system are the Catalina Island shoreboats at Avalon and the Isthmus, Newport yc shoreboats, and the San Diego Water Taxi. Many loop and p-t-p system operators also provide "on-call" service, depending on size of party and vessel required.(MDR, others) This types of service is extensively used in water areas with extensive mooring and anchorage areas, residential piers, and as a "designated driver" in active dining/bar and entertainment areas.

Generally these systems use multiple, lower capacity 10+/--20+/- passenger vessels and have a communications dispatcher which enables them to schedule multiple pick-ups if required, modify routes while underway, add vessels at peak periods, and maintain complete flexibility of service.

The complexity of the Newport Harbor potential water taxi demand is likely to require a "hybrid" of all three system types to meet configurational, volume, and diversity needs.

Potential NB Water Taxi System & Route Types Applicable to Potential Destinations/Docks

When possible Newport Harbor Water Taxi Route and System types described in the previous list are considered in relation to the possible Newport Harbor waterfront and near-waterfront destination areas and their potential water taxi stops and docks, a number of options are seen (see Figure x6). The following abbreviations are shown below to indicate (bold) the three water taxi route/system types which could be utilized to serve the various areas.

Loop Route/System = LP
Point-to-Point Route System = PTP
On-Call Route System = OC

Harbor Primary & Secondary Destination Areas, Stops & Route Types

Primary Destination Areas (docks providing access) (LP, PTP, plus some OC)

Mariners Mile (no public docks; private docks at Villa Nova, BBC, NSB, OCC) (LP)

Lido Marina Village/Peninsula/Head of Rhine/Cannery Village (Rhine Wharf dock)(LP)

Lower Rhine/Newport Pier Area/Ocean Beaches (19th/15th St. docks, NM priv. dock)(**LP**)

Balboa Island Marine Avenue / Bayside Vill. / BI Beaches (Park, Coral, Sapphire dks)(LP)

Balboa Village/Pier/Fun Zone/Flyer/ Museum/Sportfish(Ferry) (PTP, OC)

Dunes Resort/Back Bay Bistro/Launch Ramp (DR,BBB, LR docks)(PTP, OC)

Peninsula Public Parking Areas (19th St dock, Ferry, Washington St. dock)(LP)

Secondary Destination Areas (docks providing access)(primarily OC, some PTP)

Moorings, Anchorages (any public dock) (OC)

Yacht Clubs (any public dock, all yc docks) (**OC**)

Marinas (marina guest docks) (OC)

Harbormaster (harbormaster guest dock) (OC)

Harbor Resources (Balboa Yacht Basin public dock/HR dock) (OC)

Waterfront / Water-Accessible Residences (private docks as permitted by resident) (OC)

Harbor Beaches (Balboa Island public docks, Harbormaster guest dock) (OC)

Ocean Beaches (any public docks on Peninsula, Balboa Ferry dock) (OC, PTP)

Boat / Kayak Rentals (nearest public dock)(OC)

Newport Aquatic Center (NAC dock)(OC)

Newport Sea Base (NSB dock) (OC)

Collegiate Sailing & Rowing Center (CSRC dock) (OC)

Remote Parking Areas (Dunes dock, other docks in proximity to RPA's as created)(OC)

Docks/Routes/Systems - Mutual Agreement by City, Uses, Potential Water Taxi Operator

While this analysis examines a range of possible areas served, possible existing and potential dock/stops, and route/system options for a Newport Harbor Water Taxi System, is is strongly emphasized that the eventual physical configuration and operating model for such a system will result from a mutual understanding and operating agreement between the City of Newport Beach and the selected water taxi system operator which covers: (at a minimum)

- how the City's objectives for the Water Taxi System will be met by the operator
- what elements of the system are to be provided by the City (public docks, signs, etc.)
- what elements of the system are to be provided by the operator (boats, staff, etc.)
- what elements of the system are to be provided by private dock owners
- a business plan and time/revenues targets schedule for the water taxi system
- a route/stops/service areas & types operating plan for initial and evolved systems
- a system flexibility operating plan for peak periods, special events, crisis response
- professional qualifications and training, experience of all staff and captains
- vessels constructed inspected and operated for NB WT system requirements
- a jointly developed/maintained advertising program and updated websites

Potential Newport Harbor Water Taxi Service Areas, Docks/Stops, Routes Summarized

The chart below provides, in matrix form, a single display of the various elements of the conceptual Newport Harbor water taxi service areas, docks/stops and routes discussed in this Routes and Systems section of the study.

It should be noted that this information, in keeping with the purpose of the conceptual feasibility study, is also conceptual in nature, and does not represent a current or future commitment by the City, existing private uses or any potential water taxi system operator to any of its characterizations or implications.

It is intended only as a basis for further community discussion of a potential water taxi system and as an "objectives, routes and facilities" basis for future discussion with potential system operators.

<u>Potential water taxi service areas, routes, stops are combined and shown in the concept diagrams in the Three Concepts section of this report.</u>

	Pote	ntial Wat	er Taxi S	tops	Rou	te Ty	oes
Area or Activities & Uses Served	Public	Docks	Private	Docks	LP	PTP	ОС
Primary Destination Areas	existing	potential	existing	potential			
Mariners Mile Gen'l & Mar. Comml/Resturants		х	x	х	x		х
Lido Marina Vill/Penin/Rhine/Cannery Vill		х	х	х	x		х
Lower Rhine/Newport Pier/Ocean Beaches	х	х	х	х	x		х
Marina Park/Am Leg/Nwpt Blvd Com/ O Bchs	х	х			х		х
BI Marine Avenue /BI Beaches/ Bayside Vill.	х		х		х		х
Balboa Vill/Pier/Fun Zone/Flyer/Mus/O Bchs	х		x	х	х		x
Dunes Resort/Back Bay Bistro/Launch Ramp	х		х	х		x	х
Secondary Destination Areas							
Moorings (11 mooring fields)	х	х					x
Anchorages (inside and outside)	х	х					х
Yacht Clubs			х				х
Marinas (private, BYB, future Marina Pk pub.)	х	х	х	х			х
Harbormaster (office, docks, moorings, bch)	х	х					X
Harbor Resources(office, marina, store, yard)	х	х			х		х
Waterfront /Water-Accessible Residences	х		х	х	х		X
Harbor Beaches	х		х		х		х
Ocean Beaches (access across Peninsula)	х		х		х		х
Boat /Kayak Rentals, Boat Clubs	х		х				х
Newport Aquatic Center			х				х
Newport Sea Base			х				х
Collegiate Sailing & Rowing Center							х
Exsiting/Future Remote Parking Areas	х		х		х	х	х
Future Lower Castaways Uses/Water Taxi Hub		х			х	X	X
Notes:							
Notes:							
	 						

Potential Newport Harbor Water Taxi Service Areas, Docks/Stops, Routes

COSTS, REVENUES & FUNDING SOURCE CONSIDERATIONS OF A WATER TAXI SYSTEM

Introduction

This section of the analysis of conceptual feasibility of a potential Newport Harbor water taxi system examines, in general terms, the various types of capital investment and operating cost factors and the potential revenues of such a system, based upon those of similar systems.

The determination of potential startup investment, operating costs, fare structures, projected revenue sources and revenues, and thus the financial feasibility determination for any proposed Newport Harbor water taxi system is the due-diligence responsibility of any prospective private operator of such a system and their financial partners. This analysis and report do not make that determination.

The City of Newport Beach, if it decides to proceed, would consider and evaluate prospective water taxi systems and operator's financial plans and capabilities through a Request For Proposals (RFP) evaluation, selection and interview process. This process would focus on the operator's business and operating plans, including projected costs and revenues, and the operator's prior financial and operating experience and capabilities.

This process would also identify City fee and revenue requirements from the operator, potential content and duration of any agreements, and would indicate the nature and extent of any capital and/or operating funds (if any), or "in-kind" value the City might provide through city facilities and support services such as public docks, staff support, public parking and other means.

The extent to which the City of Newport Beach or any other public agency might assist in the funding of, or not fund at all, any Newport Harbor water taxi system startup or operating costs is unknown at this time and is outside the purpose and scope of this study.

Water Taxi System Startup Costs & Funding

The start-up costs of a water taxi system such as vessels, equipment, personnel, and initial operating overhead costs and capital can be significant relative to potential revenues and are generally funded either by the operator or a government agency, or a combination of both sources, depending on the cost elements and complexity.

In some jointly-funded water taxi system startups, cash, loan and credit investments may be made by both the private operator and the government agencies (city, county, regional transportation agency, state, etc.), along with other contributions or investments such as existing operator-owned water taxi vessels and personnel, use of public docking facilities, etc.

Many of the existing water taxi systems analyzed in this study received public-agency startup (and continuing operations) funding in the form of federal, state and local transportation agency grants and loans as the result of funding requests implemented as part of a implementation plan for supplemental public transportation or a similar public program.

A number of these national and regional transportation funding programs are receiving reduced or limited funding during the current recession, affecting availability and amounts.

Other systems have received various forms of additional start-up funding in the form of local community funding and/or local business association funding, and private investment by individuals or venture capital investors, also now negatively affected by the recession.

In general, it appears that most successful water taxi systems of the potential size and complexity that might be necessary and desirable for Newport Harbor have received some form of significant public agency and/or startup subsidy in order to commence operations.

As a local-region example, the Marina Del Rey Waterbus system, several months prior to its Summer 2009 operating season, received a \$300,000 start-up subsidy from Los Angeles County to enable four vessels to be constructed and to support other startup costs.

Some exceptions to the startup subsidy approach do exist, such as the single-vessel Santa Barbara water taxi system have been created and operated on an initial private-operator-only capital investment, with continuing operations funding coming from water taxi fares, charters and tours, and advertising. This Santa Barbara Harbor single-vessel point-to-point water taxi operation, which also serves as a harbor tour and party vessel, is <u>not</u> comparable to the larger water taxi system being considered for Newport Harbor.

Based upon the research performed in this analysis, which has included both existing water taxi systems and those proposed in various other feasibility studies, it appears that the range of potential startup funding costs for the private operator of a multi-stop, multi-vessel, summer season Newport Harbor water taxi system could range from \$200,000 to \$300,000, depending upon the system routes and services offered, number and type of vessels, etc.

City startup costs to upgrade public docks, provide signage, other "in-kind" startup elements might approximate \$50,000 to \$60,000, which would also represent an upgrade investment in an existing public asset base, through improvements to public docks.

These generalized private and public startup cost ranges should be considered only as "order of magnitude" estimates appropriate to the conceptual nature of this analysis, and are not based on a specific plan, and are not conclusions or recommendations of this study.

Water Taxi System Operating Costs, Revenues & Funding

Potential operating costs for a water taxi system generally consist of:

- debt service costs (if any) related to purchase of vessels; rehab of existing vessels;
- docking, fuel/electricity and related costs to berth and power the vessel fleet;
- maintenance and repair, depreciation costs of the vessel fleet;
- employment costs (salaries, benefits, etc.) of vessel captains, crew, other staff;
- overhead costs of operation (insurance, accounting, legal, security, advertising, etc.);
- fees, lease payments/percentages, taxes paid to local, state and federal agencies.

These operating costs (except for fuel/power costs) are generally within the operator's capability to control and manage, but an initial operating startup subsidy may be necessary.

Potential operating revenue sources include:

- individual and group fares on regular routes and from "on-call" service, all based on market demand and ridership volumes, special fees (bicycles, etc.;
- special event and charter revenues (to the extent they are part of markets/business);
- possible sale of beverages/food on vessels, event catering services on vessels, etc.;
- possible advertising on/within vessels, on website, by area businesses;
- possible sale of logo/brand gear featuring the water taxi system.

These revenues support the costs of operation of the system and may or may not cover operating costs and produce an operating profit during the initial operating year and beyond.

This may require flexibility on the part of the City as to whether or not an "at market rate" system or a "policy/marketing-subsidized" system is desired.

In a "market-rate" system model, operating revenues/rate structures are estimated (by operator) based upon first-year-projected ridership and then adjusted to subsequent actual ridership levels assuming that trip rates and pricing for other revenue sources are able to be adjusted by the operator as necessary, per agreement, (which should offer multi-year extension and renewability, based on operator performance).

In a "policy/marketing-subsidized" system model, rates are typically set below market rates for public policy reasons (traffic relief, public access to water/coast, etc.) and/or marketing reasons (attract more customers to commercial uses served by system, etc.). This requires some type of public and/or private subsidy of operating revenues to both attract and sustain a private water taxi system operator in a potentially profit-making role, assuming competent management. As the system increases in ridership the subsidy could be reduced/eliminated.

Which financial operating system model and operating agreement the City and potentially-benefitted commercial uses/community business organizations will offer to the prospective system operators in the Request For Proposals process requires careful consideration.

The City may wish to remain flexible on this subject during RFP structuring and operator submittal review, interviews, selection and negotiation process, since current economic conditions are in transition.

Potential operating revenues to the City include:

- fixed operating lease or agreement payment(s), (+penalty for non-performance);
- variable operating revenue percentage payments based on City schedule;
- fees for business operation and harbor use permits, other fees at startup/renewal;

The City may also wish to remain flexible on this subject during RFP structuring and operator submittal review, interviews, selection and negotiation process, since current economic conditions remain in, City fee and lease rates are under discussion.

Water Taxi System Fares /Rate Structures

The chart following this section indicates the 2009 fare and rate structures for the existing water taxi systems which were initially described and compared in the Other Water Taxi Systems section of this report, with the addition of the Catalina Island shoreboats to provide an additional example of point-to-point and on-call systems.

Rates (2009) for seven Southern California water taxi systems analyzed in this study varied from the \$1 for a one-way daytime adult fare on the Marina Del Rey Waterbus, Long Beach Aquabus, and the Balboa Island Ferry to \$7 for the San Diego Water Taxi, for an average of \$3.63. (The Balboa Island Ferry has higher rates for vehicles \$2 + \$1/passenger and bicycles)

Most Southern California water taxi systems have variable rate structures for groups, discounts for children and seniors, monthly ticket books for commuters, and, for the BI Ferry, a range of rates for vehicle/driver \$2 / passengers \$1 each and bicycle+ rider at \$1.50.

The NB-similar Fort Lauderdale (FL) water taxi system charged \$5 for a one-way adult ticket, \$15 for an all-day ticket and \$80/mo for a commuter ticket book. They also raise their daily rate to \$7 per adult after 7PM. Charter rates (where WT vessels are offered for charter) for groups are negotiable.

Of the eight water taxi systems analyzed, five - Channel Islands, Marina Del Rey, Long Beach (2), San Diego Bay, and Ft. Lauderdale (FL) - operated in 2009 with some type of subsidy.

Three systems used some type of public transportation funding to partially or largely subsidize fares, except for Channel Islands and San Diego Harbor, which used private subsidies by their respective harbor lessees associations. The Marina Del Rey water taxi vessels were also subsidized by a one-time start-up subsidy.

Three water taxi systems (Santa Barbara, Catalina Island Shoreboats, and the Balboa Island Ferry-all unique water transportation systems) had no subsidy -Santa Barbara system has other revenue sources in addition to fares and the BI Ferry has a multiple-source rate structure, while the Catalina system has been self-supporting on fares alone (except for the current recession period).

This fares /subsidies information shows the full range of approaches to fare structures-public-policy subsidy of fares, private business association subsidy of fares, fares balanced with other revenue sources, and only one, the Catalina Island Shoreboats, depending (until recently) solely on fare revenues for operation of its unique point-to-point/on-call system.

This fares/ rate structure comparison of existing water taxi systems suggests that the City of Newport Beach and the Newport Beach waterfront and near-waterfront commercial uses which would be served by a potential Newport Harbor water taxi system may need to consider a potential joint public/private subsidy if such a system is considered desirable.

It is beyond the scope and mission of this analysis and the Committee to recommend the rationale, structure, sources or amount of any potential subsidy, but it should be considered in any City decisions concerning the system and defined and discussed in any Request For Proposals offered to the private sector.

SOUTHERN CALIFORNIA 8	SOUTH F	& SOUTH FLORIDA HARBOR WATER TAXI/FERRY SYSTEMS -SUMMER 2009	ARBOR	WATER	TAXI/F	ERRY 9	YSTEMS	-SUMM	ER 2009		
	F/	FARES / RATE STRUCTURES	TE STRU	ICTURES							
AREAS/HARBORS											
SOUTHERN CALIFORNIA	Multi-Stop	Pt-to-Pt	On-Call	Seasonal	Annual	Stops	Operator	Subsidy	Vessels	Fare	Fare
										1 way	day/mo
Santa Barbara Harbor	×	×	×	×	×	2	private	no	1	\$4	var.
;	,		,	,		,				!	
Channel Islands Harbor	×		×	×		9	private	yes	7	\$2	
Marina Del Rev	×	×	×	×		7	private	yes	ı	\$1	\$5/\$30
Long Beach Harbor/ ABay											
Downtown/Rainbow Harbor WT	×		×		×	9	private	yes	1	\$1	
Alamitos Bay Shuttle	×		×		×	3	private	yes	1	\$5	
Newport Harbor (Balboa Ferry)		×		×	×	2	private	ou	3	\$1	/\$35
San Diego Bay	×	×	×		×	10	private	yes	2	\$7	
Catalina Island Shoreboat		×	×	×	×	var.	private	ou	8	\$5	var.
SOUTH FLORIDA											
Fort Lauderdale Area	×	×	×	×	×	11	private	yes	8	\$5	\$15/\$80
Notes:	1. Ft. Laude 2. Most syst 3. Marina Do 4. Refer to C 5.All system 6.Balboa Isl	 Ft. Lauderdale system is "green"-operates all vessels on bio-diesel and 2 on diesel- electric power Most systems are flexible, able to shift from multi-stop to point-to point based on actual demand Marina Del Rey and Ft. Lauderdale route systems are the most similar to NB Harbor characteristics Refer to detailed system information for schedules, routes, areas and use served, rates SAll systems (including NB Balboa Ferry offseason) offer group charters whwn vessels are available Balboa Island Ferry rate shown is for an adult; kids less; bicycles & cars additional 	n is "greer iible, able t E. Lauderd em inform NB Balbos te shown	n"-operate to shift fro lale route : nation for s a Ferry off is for an a	s all vess m multi- systems schedules season) (dult;kids	sels on b stop to l are the s, routes offer gro less; bi	io-diesel a boint-to po most simil , areas an oup charte cycles & c	ind 2 on daint based ar to NB F dase servers when vars additionars	iesel- elec on actual larbor cha 'ed, rates essels are nal	ctric pow demand aracterist availabl	er ics e

THREE CONCEPTS FOR A NEWPORT HARBOR WATER TAXI SYSTEM

Introduction

The preceding sections of this analysis report have discussed, individually, the main factors (markets, operator, etc.) and elements (docks, vessels, routes, etc.) of a potential water taxi system which could serve Newport Harbor and have examined the characteristics of existing water taxi systems in Southern California and Florida.

The conclusions of each of the preceding analysis sections affirmatively answer these questions, by showing that the necessary factors and elements are/could be present to potentially create a privately-operated seasonal Newport Harbor water taxi system.

Remaining to be confirmed are the specific elements, decisions, actions and people needed to insure it is adequately funded, strongly marketed, professionally operated & managed.

These remaining steps will be accomplished in the review of the conclusions and recommendations of this report and through the results of any subsequent Request For Proposals (RFP) process and potential selection/role of a water taxi system operator, and by actions of the City of Newport Beach and the local waterfront business community.

This section of the analysis and report variously combines these factors and elements and their related conclusions and choices/cautions into three concepts for Newport Harbor water taxi systems to serve as a basis for community discussion and decision-making.

These three examples represent the most typical examples of existing successful water taxi systems found during this research and analysis effort that seem applicable to Newport Harbor, among many alternatives which may be applicable.

As noted in this report, potential water taxi system alternatives require the same physical and operational elements, varying by alternative type and extent, as described below.

Elements of A Newport Harbor Conceptual Water Taxi System

- **A. Base:** A system "hub" or "base", generally central to the lower and upper bays and capable of providing overnight docking storage and service for the vessel fleet as well as a central reservations, scheduling and traffic dispatch center.
- **B.** Vessels: A mix of vessel capacities and capabilities to meet ridership volumes and cycles, cost-effective to operate, "green" to the extent possible, able to reach all docks.
- **C. Docks/Stops:** A core infrastructure of upgraded (signage, painting, surfaces) existing and new-in 2010 public docks, along with participating publicly-accessible privately-controlled commercial, club, and institutional docks, and at-request private residence docks. Dock agents would be located at the most heavily-used public docks.
- **D. Routes:** The system could include a combination of loop routes connecting designated docks/stops around the harbor perimeter, point-to-point routes connecting two or more designated docks/stops and random/on-call routes to and between docks as requested, or be based on only one or two of these route types.
- **E. Schedule/Frequency:** A fixed schedule ("10:30"), frequency ("every 10 minutes"), or on-call ("we'll be there in 10 minutes"), or a combination of all.
- **F. Fare:** A "market rate" fare system covering each leg of a route (one-way or round trip), based on one-time or day-pass, individual or family/group, by time/day/peak.

Three Newport Harbor Water Taxi System Concepts (of many possible alternatives)

The three NH water taxi system concepts created for discussion purposes are:

- **1. Basic System:** a limited water taxi service and system initiated as a one-season "trial run" to test market, facilities, vessels, operations and financial performance, with an option to expand operations and duration of the operating agreement if feasible and desirable.
- 2. **Expanded System:** an expansion of the Basic System, adding vessels, routes, schedules, trip frequency, hours of operation, fees and other services as supported by demand and plans based on initial year performance, with extended operating agreement and other changes as appropriate.
- **3. On-Call-Only System:** a system with vessels grouped at a central base or bases which respond only to requests for dock pickup and dropoff locations relayed by a dispatcher/reservation center and from dock "agents" handling walk-up business at high-volume docks throughout the harbor.

Basic Newport Harbor Water Taxi System Concept

The elements of this Basic System alternative are shown on the accompanying Basic Concept Plan and represent a suggested "starter kit" combination of temporary and existing facilities for a single-season, basic system test of an operating concept jointly developed by the City of Newport Beach, the waterfront business community and aselected private water taxi operator.

In this example, the fixed-base location/site, all construction and facilities rentals would be for a interim, temporary use, with the capability of being removed from the site if the system did not continue for a second season, or if the base is to be relocated or the Lower Castaways site is required for a higher-priority public purpose.

Alternative basing sites could be proposed by City and/or the selected private operator, or by a local private waterfront commercial use/marina, but would need to meet the criteria of: centrality within the Harbor; ease of public access from major streets and parking (ideally on north side of Harbor); operations office space/public rest rooms; adequate docks/utilities/access; capability of day/nite operation.

Base: A <u>temporary</u> "test" base at the City's Lower Castaways site, developed to include:

- fleet storage/service docks ADA-capable boarding docks, utilities, lighting, signage
- parking for public, employees w/lighting, signage, Dover access / lights synchro
- trailer-based offices, ticketing, restrooms, f&b kiosk, shade structure waiting areas
- pedestrian walkways (lighted and signed) connecting all of above areas

Vessels: A "test mix" of vessels ("green" to the extent feasible) including:

- 2 (+1 reserve) medium-capacity, 18-28 passenger(bike/stroller/ADA-capable) vessels
- 2 (+1 reserve) small-capacity, 8-12 passenger vessels (for on-call service)
- 1 large capacity 30-90 passenger vessel (for peak, group, special event use)

Docks: A combination of public docks/stops & private docks: (private suggested only)

Public Docks/Stops (regular routes) (6 total)

- Lower Castaways Base Dock (new/temp.) (parking)
- Coral Ave Dock (BI) (existing)
- Washington Street Dock (Peninsula) (existing)
- 19th Street Dock (Peninsula) (existing)
- Rhine Wharf Dock (Lido/Rhine) (new in 2010)
- Launch Ramp Dock (Back Bay) (existing)(as-requested/on-call)(remote parking)

Private Docks (as-requested/on-call only) (potentially 15 total-this list)

- Balboa Bay Club (existing)
- Balboa Marina visitor dock (existing)
- 8 Dock & Dine Restaurant Docks (existing)
- 5 Yacht Club Visitor Docks (existing)

Routes: A combination of loop, point-to-point on fixed routes and on-call on random routes

Loop Route

- 6 Public Docks/Stops (2 vessels on staggered clockwise/counterclockwise routes around Harbor perimeter; stops only at docks with confirmed passengers per agents)

Point-to Point Routes (examples only)

- Base to Launch Ramp Dock (remote pkg) & return (1 vessel or more per agent)
- Base to 19th Street Dock (Newport Pier) & return (1 vessel or more per agent)

On-Call Routes

- Base to requested pickup and dropoff dock locations, per call (vessels variable)
- Base to requested pickup and dropoff mooring/anchorage locations, per call

Schedule: Loop on semi-fixed schedule, point-to-point & on-call as required

Loop Routes

- Base-West & East Harbor Loops: 20 minutes each way, plus loading times

Point-to Point Routes

- Base -LRD-Base: 10 minutes each way, 10 min. loading/unloading each end
- Base-19th St-Base: 15 minutes each way, 10 min. loading/unloading each end

On-Call Routes

- No schedule, trip time based upon pickup-dropoff distances at 4-5 knot speed

Fare:

- (Fare structure to be determined by selected operator/market)



Basic Concept Newport Harbor Water Taxi System

Expanded Newport Harbor Water Taxi System Concept

The elements of the Expanded System alternative are shown on the accompanying Expanded Concept Plan and are a potential expansion of the initial Basic System vessels, docks/stops, routes, and schedules described in the preceding section of this report, assuming that the initial system and its operator (or another) are to continue beyond the first season of operation.

For the purposes of comparison, the Expanded System retains the initial Lower Castaways fixed-base location/site, changing the temporary construction and facilities rentals to a more permanent, continuing, but short-term presence.

As with the Basic System, the capability is retained to remove the improvements to another site if the water taxi system does not continue, if the operating agreement is revised, or if the Lower Castaways site is required for a higher-priority public purpose.

LIke the Basic System, alternative basing sites could also be proposed by City and/or the selected private operator, or by a local private waterfront commercial use/marina.

These alternate sites would also need to meet the criteria of: centrality within the Harbor; ease of public access from major streets and parking (ideally on north side of Harbor); operations office space/public rest rooms; adequate docks/utilities/access; capability of day/nite operation.

Base: The Base at the City's Lower Castaways site would be maintained/upgraded:

- fleet storage/service docks ADA-capable boarding docks, utilities, lighting, signage
- parking for public, employees w/lighting, signage, Dover access / lights synchro
- trailer-based offices, ticketing, restrooms, f&b kiosk, shade structure waiting areas
- other uses and equipment deemed necessary after initial year experience
- pedestrian walkways (lighted and signed) connecting all of above areas

Site improvements, docks, leased trailers and other equipment, parking, etc. of the Base would be used for other City/public purposes during off-season, (harbor maintenance and services, security, dredging staging, etc.) and returned to water taxi operator for use in advance of the next season. To the extent necessary and feasible, some of these other activities might continue on the site on an annual basis, separate from the water taxi operation.

Vessels: An expanded mix of vessels ("green" as feasible) would be provided as needed:

- 3-4(+1reserve)medium-capacity,18-28 passenger vessels (for loop service)(+1-2?)
- 3-4(+1 reserve) small-capacity, 8-12 passenger vessels (for on-call service)(+1-2?)
- 1 large capacity 30-90 passenger vessel (for peak, group, special event use)(same)

Docks: Expanded public docks/stops & private docks: (private suggested only)

Public Docks/Stops (regular routes) (total – 14; 8 docks <u>added</u> in expansion italicized)

- Lower Castaways Base Dock (expanded for added vessel storage)

- M Street Dock (Peninsula) (existing)
- Park Avenue Dock (Balboa Island) (existing)
- Coral Ave Dock (BI) (existing)
- Sapphire Ave. Dock (BI) (existing)
- Balboa Yacht Basin (Bayside) (existing)
- Opal Ave. Dock (BI) (existing)
- Washington Street Dock (Peninsula) (existing)
- 19th Street Dock (Peninsula) (existing)
- 15th Street Dock (Peninsula) (existing) or Marina Park Dock (new 2012+)
- Rhine Wharf Dock (Lido/Rhine) (new in 2010)
- Central Avenue Dock (possibly new in 2011+?)
- Launch Ramp Dock (Back Bay) (existing)(as-requested/on-call)(remote parking)

Private Commercial/YC/Institutional Docks (as-requested/on-call only) (22+ total)

- Balboa Bay Club (existing)
- Balboa Marina visitor dock (existing)
- Newport Bay Marina (2011-12) (new)
- Lido Village Marina (2011-12) (new)
- Ardell Site Marina (2012+) (new)
- Collegiate Sailing/Rowing Center (existing); Sea Base (existing) NA Center (existing)
- 8 Dock & Dine Restaurant Docks (existing) (plus added D&D restaurants, number unk.)
- 5 Yacht Club Visitor Docks (existing)

Routes: A combination of loop, point-to-point on fixed routes and on-call on random routes

Loop Route

- 14 Public Docks/Stops (2 vessels on staggered clockwise/counterclockwise routes around Harbor perimeter; stops only at docks with confirmed passengers per agents)

Point-to Point Routes (examples only)

- Base to Launch Ramp Dock (remote pkg) & return (1 vessel or more per agent)
- Base to 19th Street Dock (Newport Pier) & return (1 vessel or more per agent)

On-Call Routes

- Base to requested pickup and dropoff dock locations, per call (vessels variable)
- Base to requested pickup and dropoff mooring/anchorage locations, per call

Schedule: Loop on semi-fixed schedule, point-to-point & on-call as required

Loop Routes

- Base-West & East Harbor Loops: 20 minutes each way, plus loading times

Point-to Point Routes

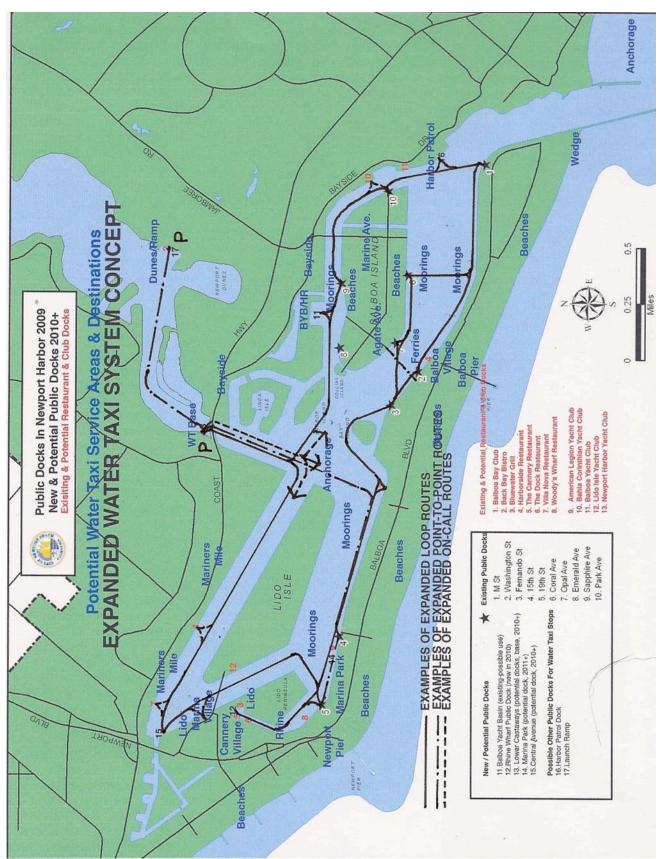
- Base -LRD-Base: 10 minutes each way, 10 min. loading/unloading each end Base-19th St-Base: 15 minutes each way, 10 min. loading/unloading each end

On-Call Routes

- No schedule, trip time based upon pickup-dropoff distances at 4-5 knot speed

Fare:

- Fare structure determined by selected operator, based on initial year experience, and any added services, extended hours, added/inflationary operating costs, etc.



Expanded Concept Newport Harbor Water Taxi System

On-Call-Only Newport Harbor Water Taxi System Concept

The elements of this On-Demand-Only System conceptual alternative are shown on the Expanded Concept Plan.

They include a potential combination of temporary and existing facilities for a single-season test of an on-call-only water taxi system operating concept jointly developed by the City of Newport Beach, the waterfront business community and a selected private water taxi operator.

This system includes a fleet of water taxi vessels grouped at a single central base or multiple bases, with no set schedule or routes, responding only to requests for dock pickup and dropoff locations relayed by a dispatcher/reservation center and from dock "agents" handling walk-up business at high-volume docks/service areas throughout the harbor.

The fixed-base Castaways site and all its construction and facilities rentals would be for a interim, temporary use, with the capability of being removed from the site if the system did not continue for a second season, or if the base is to be relocated or the Lower Castaways site is required for a higher-priority public purpose.

Alternative basing sites could be proposed by City and/or the selected private operator, or by a local private waterfront commercial use/marina and/or vessel fleet operator.

As with the other alternatives, any water taxi base would need to meet the criteria of: centrality within the Harbor; ease of public access from major streets and parking; operations office space/public rest rooms; adequate docks/utilities/access; capability of day/nite operation.

Base: A <u>temporary</u> base at the City's Lower Castaways site, or at another site (public or private) developed or renovated to include:

- fleet storage/service docks ADA-capable boarding docks, utilities, lighting, signage
- parking for public, employees w/lighting, signage
- offices, ticketing, restrooms, f&b kiosk, shade structure waiting areas
- pedestrian walkways (lighted and signed) connecting all of above areas

Vessels: A mix of vessels ("green" to the extent feasible) including:

- 2 (+1 reserve) medium-capacity, 18-28 passenger(bike/stroller/ADA-capable) vessels
- 2 (+1 reserve) small-capacity, 8-12 passenger vessels
- 1 large capacity 30-90 passenger vessel (for peak, group, special event use)

Docks: public docks/stops & private docks, with a minimum coverage including :

Public Docks/Stops (regular routes) (6 total)

- Lower Castaways Base Dock (new/temp.) (parking)
- Coral Ave Dock (BI) (existing)
- Washington Street Dock (Peninsula) (existing)

- 19th Street Dock (Peninsula) (existing)
- Rhine Wharf Dock (Lido/Rhine) (new in 2010)
- Launch Ramp Dock (Back Bay) (existing)(as-requested/on-call)(remote parking

Private Docks (as-requested/on-call only) (potentially 15 total+residential)

- Balboa Bay Club (existing)
- Balboa Marina visitor dock (existing)
- 8 Dock & Dine Restaurant Docks (existing)
- 5 Yacht Club Visitor Docks (existing)
- Residential docks at owner request (existing)

Routes: No specific routes-on-call random routes covering at least the following:

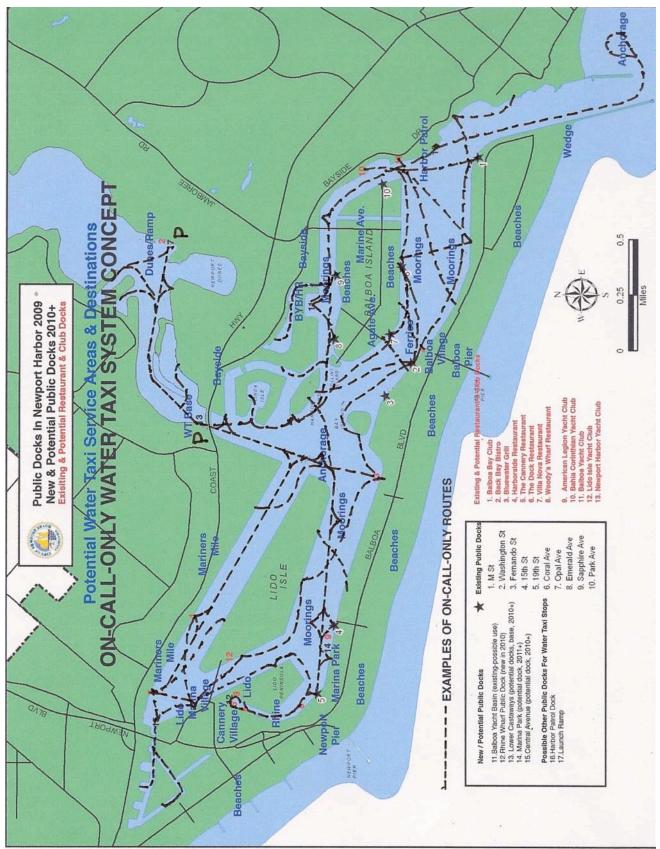
- 6 Public Docks/Stops around Harbor perimeter w/ confirmed passengers per agents
- Base to Launch Ramp Dock (remote pkg) & return on request
- Base to 19^{th} Street Dock (Newport Pier) & return on request
- Base to sequential or single pickup, dropoff dock locations, on request
- Base to sequential or single pickup, dropoff mooring/anchorage locations, on request

Schedule: unscheduled, on-call as required during operating hours

- No schedule, trip time based upon pickup-dropoff distances at 4-5 knot speed

Fare:

- Fare structure to be determined by selected operator/market



On-Call-Only Concept Newport Harbor Water Taxi System