



Date: September 23, 2019

To: Thomas B. Modica, Acting City Manager *T. Modica*

From: John Keisler, Director of Economic Development *JK*

For: Mayor and Members of the City Council

Subject: **Update on Queen Mary Projects and Long Beach Cruise Terminal Dome**

At its Special Meeting on September 18, 2018, the City Council received an update from Economic Development Department (ED) staff regarding the status of repairs at the historic Queen Mary (see attached). As part of the update, staff summarized the recommendations from the Marine Survey Report, reviewed the capital improvement work completed to date, provided recommendations about funding, and reported the status of remaining unfunded priority projects. The full [Queen Mary Update](#) presentation can be found on the City's website.

Following the update, the City Council requested the City Manager to (1) report back on the status of unfunded Historic Preservation and Capital Investment Plan (HPCIP) projects, and (2) provide an update on the condition of the Long Beach Cruise Terminal Dome. The purpose of this memorandum is to provide an update regarding activities related to this request.

Background

On November 1, 2016, the City Council approved a 66-year lease with Urban Commons (Lessee) for the operation, management, and preservation of the Queen Mary. The leasehold area includes the Queen Mary, Catalina Express, and Carnival Cruise Lines, which currently operates the Long Beach Cruise Terminal in the geodesic dome next to the Queen Mary. Under the terms of the lease, the City established a HPCIP fund for ongoing preservation, conservation, and restoration projects associated with the special historic status of the ship. The HPCIP fund is exclusively supported by leasehold revenue streams.

To address some of the most critical repairs, the City committed to immediately funding \$23 million by using existing reserves and issuing bonds to be repaid by rent revenue and passenger fees generated from Carnival Cruise Lines through 2026. The initial funding allowed the Lessee to complete seven major life safety and structural projects, including repair of the Fire and Life Safety System ship-wide, replacement of the expansion joints, and additional major structural repairs and renovations highlighted in the Queen Mary Update to the City Council.

Status of HPCIP Projects

As projected, the City and its Lessee made significant progress on critical HPCIP construction projects within the first three years of the new lease agreement. To date, 19 of the 27 projects originally identified in the HPCIP fund project schedule are completed or in-progress, with 8 additional projects pending a funding source. Following is a summary of the projects and their approximate costs.

Projects that are in progress or pending are prioritized as Critical, Urgent, or Midterm. These determinations were made in consultation with the City's third-party professional engineer, who monthly inspects and documents projects based on risk to safety, structural integrity, and ongoing preservation of the Queen Mary. Critical projects are those that have the greatest impact on the integrity and long-term preservation of the Queen Mary. Urgent projects are those that need to be addressed but do not impact the immediate safety or structural integrity of the Queen Mary and that the City's inspecting engineer recommends being addressed within the next three to five years. Midterm projects are those that need to be addressed as funds become available.

Completed Projects:

Fire and Life Safety Systems

Improvements included correction of 151 Fire Code violations; inspection, flowing, and repair of sprinkler pipes throughout 1 million square feet of the ship; replacement/installation of 5,000 quick-response sprinkler heads; and, all major alarm, lighting, and sprinkler certifications completed. Significant deficiencies in the Fire and Life Safety Systems were discovered ship-wide as this project progressed. This project was originally budgeted at less than 1 percent of funds available and grew to nearly 25 percent.

Project Budget: approximately \$5.3 million.

Structural: Deck M and Deck A

A catwalk in the Ghosts and Legends attraction was shut down in April 2016 due to structural instability. The raised floors were re-built; as well, nearby boiler rooms were demolished, de-watered, and cleared of rust.

Project Budget: approximately \$2.3 million.

Exhibit Hall and Boiler Rooms Demolition

The Exhibit Hall floor was removed from structural posts welded to the hull, which were severely deteriorated. The entire area, including Boiler Rooms 3 and 4, was cleared of standing water, leaks repaired, and the hull treated with a rust inhibitor.

Project Budget: approximately \$1.3 million.

Expansion Joints

All three of the ship's expansion joints were extremely corroded and no longer watertight or structurally sound. The replacements were designed to be historically correct.

Project Budget: approximately \$715,000.

Exterior Hull Paint and Rust Repair

The ship had numerous areas where existing paint had flaked, chipped and peeled, exposing metal to the elements and creating rusted sections of hull. This project included rust remediation, application of rust inhibitor, and the priming and painting of 240,000 square feet of hull with original and historic paint colors. Painting of an area of the port-side hull is still underway.

Project Budget: approximately \$2.8 million.

Exterior Top of House (TOH) Paint and Rust Repair

This project included rust remediation, application of rust inhibitor, and the priming and painting of areas of the Top of House and all three funnels with original and historic paint colors. Completed prior to an improvement in the painting preparation method, the rear funnel will be re-painted, along with some TOH sections that were not included in the earlier work, at no additional HPCIP fund expense.

Project Budget: approximately \$1.2 million.

Side Tanks at Exhibit Hall

Side tanks on both sides of the ship that were leaking onto and under the lower Exhibit Hall floor were repaired and made watertight.

Project Budget: approximately \$472,500.

Main Cabled Lighting Along Top of Ship (Completed by Lessee)

Prior system of cabled lighting was inoperable due to unsafe accessibility. Urban Commons replaced the system, outside of the HPCIP, with Wi-Fi-controlled, color-changing LEDs from bow to stern.

Project Budget: paid for by Lessee.

In Progress Projects:

Exhibit Hall Floor Replacement (In Progress)

The rebuild of the Exhibit Hall floor, which was demolished due to deterioration, is underway and scheduled to be completed by the Lessee.

Project Budget: Pending bids.

Top of House Roofing/Deck Repairs and Storm Drain System Repairs

This item accounts for two critical projects listed in the Marine Survey and the HPCIP project list that have been combined as a result of their impact on one another. Repairs addressed significant storm damage that forced the closure of Sir Winston's Restaurant and Lounge, Captain's Quarters, and Wheel House among other areas. Work included replacing and restoring roofs, replacing rotting and leaking decks, and rebuilding interior spaces. This project is substantially complete.

Project Budget: approximately \$6 million for both projects.

Marine Survey Projects

Miscellaneous identified in the Marine Survey included structural review of girders in the bottom tank (completed), assessment of watertight bulkhead doors (completed), repairs to outer hull around the propeller, and other structural reinforcements.

Project Budget: approximately \$740,000.

HVAC Repairs

Multiple HVAC systems throughout the ship had varying issues. Inspections were performed, TOH leaks eliminated, and repairs made at Exhibit Hall and King George Room. Some systems were repaired in the course of other repair projects.

Project Budget: \$761,000.

Electrical System Repairs

Replacement of 13 Ground Fault Circuit Interrupters is needed.

Project Budget: \$232,600.

Side Shell and Bridge Wing Repairs

See below for project description.

Project Budget: \$146,200.

Landside Utility Lines Replacement

Water and sewer lines are showing signs of wear and in need of replacement. Fire lines were replaced with HPCIP funding.

Project Budget: \$100,800.

Top of House Hand Fence and Railing Installation

This project would address a safety issue by deterring public access to service ladders with a new fence and railing.

Project Budget: \$2,550.

Domestic Water Line Repairs

Repair of leaking in-wall domestic water lines, and replacement of heat exchangers.

Project Budget: \$133,000.

Sewer System Repairs

System was leaking throughout the ship. New sewage tanks were installed, wing and bottom tanks drained, cleaned, and taken off-line.

Project Budget: \$487,000.

Condensate Pump System/Line Repairs

Condensate is liquid formed by condensation. Original condensate lines and collection systems throughout ship are leaking and in need of repair.

Project Budget: \$25,600.

Lifeboat Removal

See below for project description.

Project Status: Critical.

Project Budget: Pending bids and identified funding source.

Pending Projects:

Propeller Box Renovation

Repair to propeller box structure, cathodic protection, and lighting systems.

Project Status: Urgent.

Project Budget: Pending bids and identified funding source.

Relocation of Sewage and Mechanical Room

Relocation of sewage tanks currently housed in temporary location, to allow for access per Health and Safety guidelines.

Project Status: Urgent.

Project Budget: Pending bids and identified funding source.

Bilge System Repair

New pumps, floats, pickups and control panels are needed.

Project Status: Urgent.

Project Budget: Pending bids and identified funding source.

Health Department Upgrades

Some upgrades were completed in conjunction with other HPCIP projects, most notably repair and upgrades to the trash chute in Sir Winston's. Still pending is the replacement of make-up air units in kitchens on R Deck and Promenade Deck.

Project Status: Urgent.

Project Budget: Pending bids and identified funding source.

Miscellaneous Safety Projects

Repairs needed to various trip hazards and barriers in multiple locations, and to an employee entrance.

Project Status: Midterm.

Project Budget: Pending bids and identified funding source.

Lifeboat Replacement

Replacement of lifeboats with fiberglass molds.

Project status: Midterm.

Project Budget: Pending bids and identified funding source.

Additional Pending Projects

One additional project not identified in the Marine Survey, the priority of which is currently unknown, may also prove urgent or critical upon receipt of a pending engineering assessment. A crack in one of the wharf pilings near the Exhibition Hall gangway has been recently documented by the City's third-party engineer. The City funded an inspection of the condition of all pilings and related structures, costing approximately \$55,000, which was completed in early September 2019. A report of findings is anticipated in the next several weeks.

Next Steps for Queen Mary Repairs

Inclusive of the HPCIP projects described above, the City's inspecting engineer has deemed two projects as 'Critical' and has recommended the City and Lessee prioritize these issues within the next 12-24 months. Although a funding source is yet to be identified, City staff have encouraged the Lessee to begin the process of project scoping and collecting estimated construction costs. Additional detail about these two 'Critical' projects is included below.

Lifeboat Removal

Project Cost: approximately \$2.3 million

The 22 lifeboats suspended from davits—small pairs of cranes—above the Promenade Deck are affected by rot and corrosion in several areas. The main keels—the centerline at the bottom of the lifeboat—of most of the lifeboats are rusted through, the wood interiors/uppers have rotted, and the hooks that suspend the lifeboats from the davits are rusting, as are the davits themselves, which support the approximately 10,000- to 12,000-pound lifeboats. The vessels may ultimately be at risk of falling from the ship or breaking apart in place. In June 2018, Lifeboat No. 19, on the starboard side, was determined to be structurally unsound. A support was installed by the Lessee to protect against keel failure and render the area safe, although the City's inspecting engineer has noted this may not guarantee that other portions of the boat will stay together. While the operator identifies funding, they will continue to monitor the lifeboats and will reinforce the structures as needed.

Side Shell and Bridge Wings

Project Cost: approximately \$4.7 million

The side shell is a portion of outer steel on the Promenade Deck level below the window line. The side shell steel also connects to the davits that support and distribute the weight of the 22 lifeboats. The side shell, along with the bridge wings - two small steel cantilevered structures extending from either side of the bridge - are corroded and deteriorated. Some aesthetic repairs made to the side shell in 2017, in anticipation of future repair or replacement, have begun to fail and are being removed by the Lessee. Access to the bridge wings has been closed for two years.

City staff will work with the Lessee and its third-party structural engineer to prepare a plan for completing the remaining Critical Projects within the recommended two-year period. This plan, currently under development by the Lessee, will include strategies, costs, and timing for replacing the lifeboats and repairing the side shell of the ship in a historically appropriate way. Although an additional study is underway to identify the most cost-effective approach to this work, the preliminary budget for both Critical Projects is estimated to be \$7 million. This total estimated amount includes approximately \$700,000 for the removal and proper disposal of the lifeboats, \$4.7 million for the side shell repair and replacement drainage system, and \$1.6 million for renting a specialized crane. Under the lease, critical ship repairs are the responsibility of Urban Commons. Although budget has yet to be identified, staff is working with the Lessee to improve operational income and to develop new revenue streams associated with the Queen Mary and surrounding activities. City staff hope to receive from Urban Commons an update on this plan by the end of the year.

Status of Dome

At the September 18, 2018 Special Meeting, the City Council also asked the City Manager for an update regarding the maintenance, operation, and cleaning of the Geodesic Dome (Dome) housing the Carnival Cruise Line Long Beach Cruise Terminal. As part of the 2016 Agreement, the maintenance and cleaning of the Dome is the responsibility of the Lessee. Staff have confirmed with the Lessee that it was last cleaned in May 2016. The work included power washing, application of a spray wax coating, and some caulking work as needed.

Staff communicated to the Lessee the appearance of the Dome is a priority of the City and the City Council have asked for improvements to its appearance. As such, the Lessee has obtained four estimates for cleaning of the Dome exterior, including a pressure wash with solvent and mechanical cleaning as needed. The Lessee is pursuing one additional estimate and scheduling a spot test pressure wash to determine if further steps will be needed. The cleaning is estimated to cost \$200,000 and is anticipated to be completed by the end of the year.

Conclusion

As highlighted above, there are several Queen Mary and Dome projects that will take place over the coming months, while other projects described in the Marine Survey Report are expected to be completed over many years. Staff will continue to meet with the Lessee monthly to inspect maintenance, review construction plans, identify funding sources, and provide approvals as needed. Additionally, staff will continue to meet with the City Auditor on a quarterly basis to provide status reports on key elements of the Agreement.

For any questions regarding these matters, please contact Johnny M. Vallejo, Economic Development Business Operations Manager, at Johnny.Vallejo@longbeach.gov or (562) 570-6792.

PHW:JK:JMV:LCC

ATTACHMENT

cc: CHARLES PARKIN, CITY ATTORNEY
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MONIQUE DE LA GARZA (REF. FILE. #18-0841)



Queen Mary Update

Sept. 18, 2018



CITY OF
LONG BEACH

Site

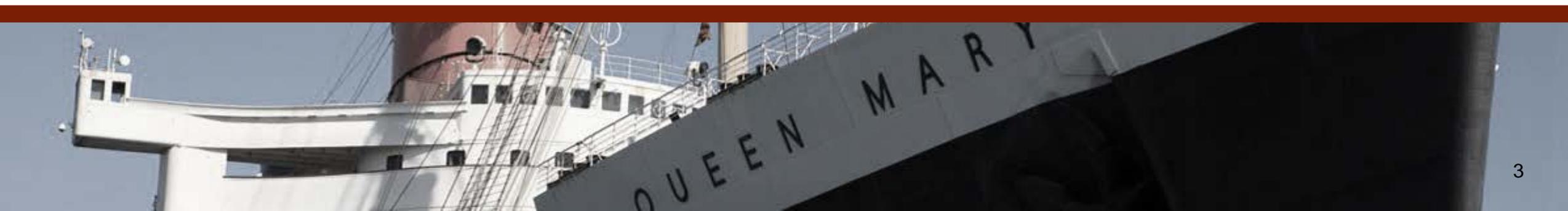
Premises: 64+ acres (43.38 land / 20.84 water)

Leasehold area includes Carnival Cruise Lines, Catalina Express, and Island Express Helicopters



Recent History

- January 2009: City Council assigned lease to Garrison Investment Group following default of previous operator
- November 2015: Council approved assignment of lease to Urban Commons
- November 2016: Council approved 66-year lease with Urban Commons for the operation, management, and preservation of the Queen Mary; and rights to develop the 64+ acre site.



Lease Details

- 66-year term
- Base Rent
 - \$300,000/year
- Per Passenger Fee Rent (based on Carnival passenger counts):
 - Approx. \$2.15M/year through 2021, then split between City and Urban Commons
- Pass-through Rent
 - Approx. \$89,000/year
- Percentage Rent
 - 10 percent of net site revenues after a priority rate of return (9 percent)



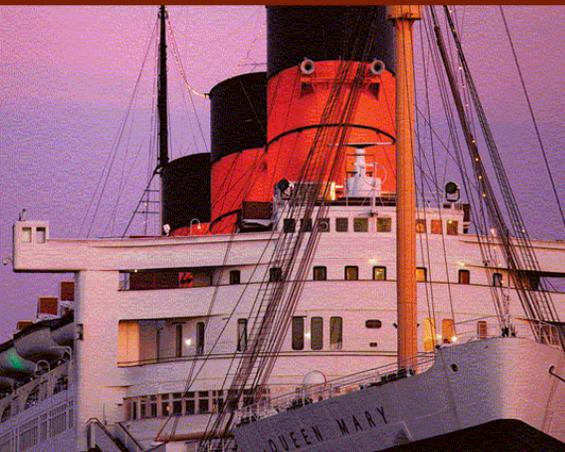
Addressing Repairs and Preservation

- Queen Mary Heritage Foundation Support Payments
 - 5 payments of \$25,000
- Base Maintenance and Replacement Plan (BMRP) Fund
 - Funded by UC, percentage of site revenues
 - \$196,643 (2016-2017) for improvements, replacements, renovations
- Historical Preservation and Capital Investment Plan (HPCIP) Fund
 - Funded by Queen Mary rental streams
- Marine Survey, commissioned by previous operator, identified short- mid- and long-term repairs at cost of \$235 million to \$289 million.
- City committed to funding \$23 million for most urgent repairs, through the HPCIP
 - \$5.8 million — existing reserves
 - \$17.2 million — bonds
- City and UC agreed to invest 7 to 10 years of rent revenues toward \$17.2 million debt service

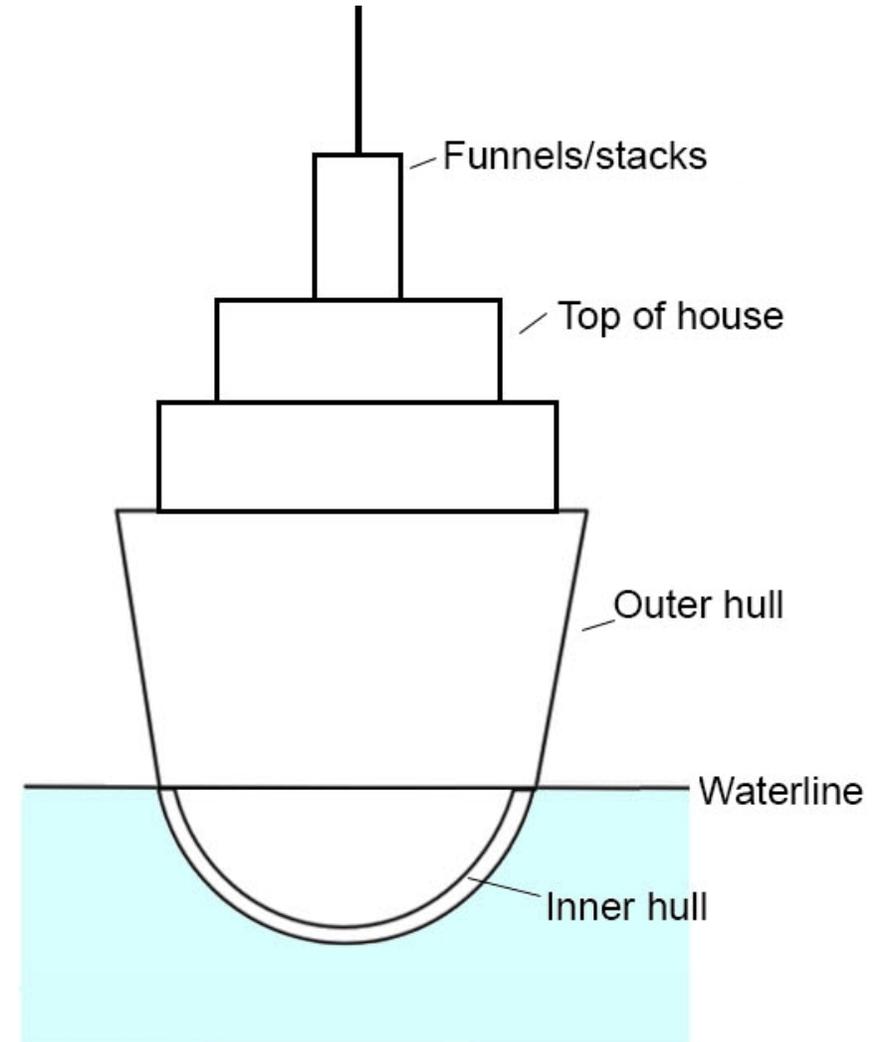
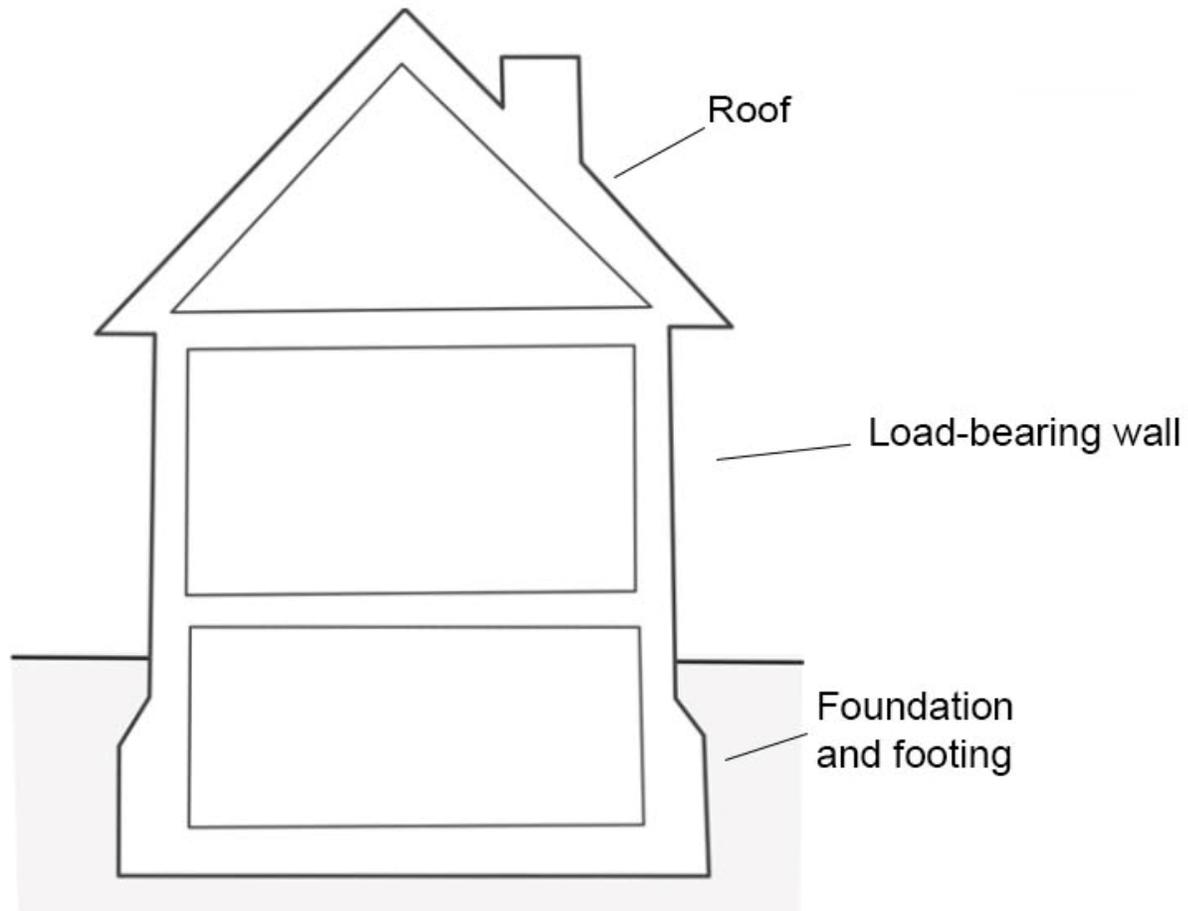


Historic Preservation and Capital Investment Plan Projects

- Original list included 27 projects (2017 HPCIP)
 - As work progressed, projects were reprioritized to address critical safety and structural concerns, and unforeseen expansions in scope
 - Completed and in-progress projects (2018) prioritize fire- and life-safety issues, water intrusion, and structural integrity



Structure of the Queen Mary



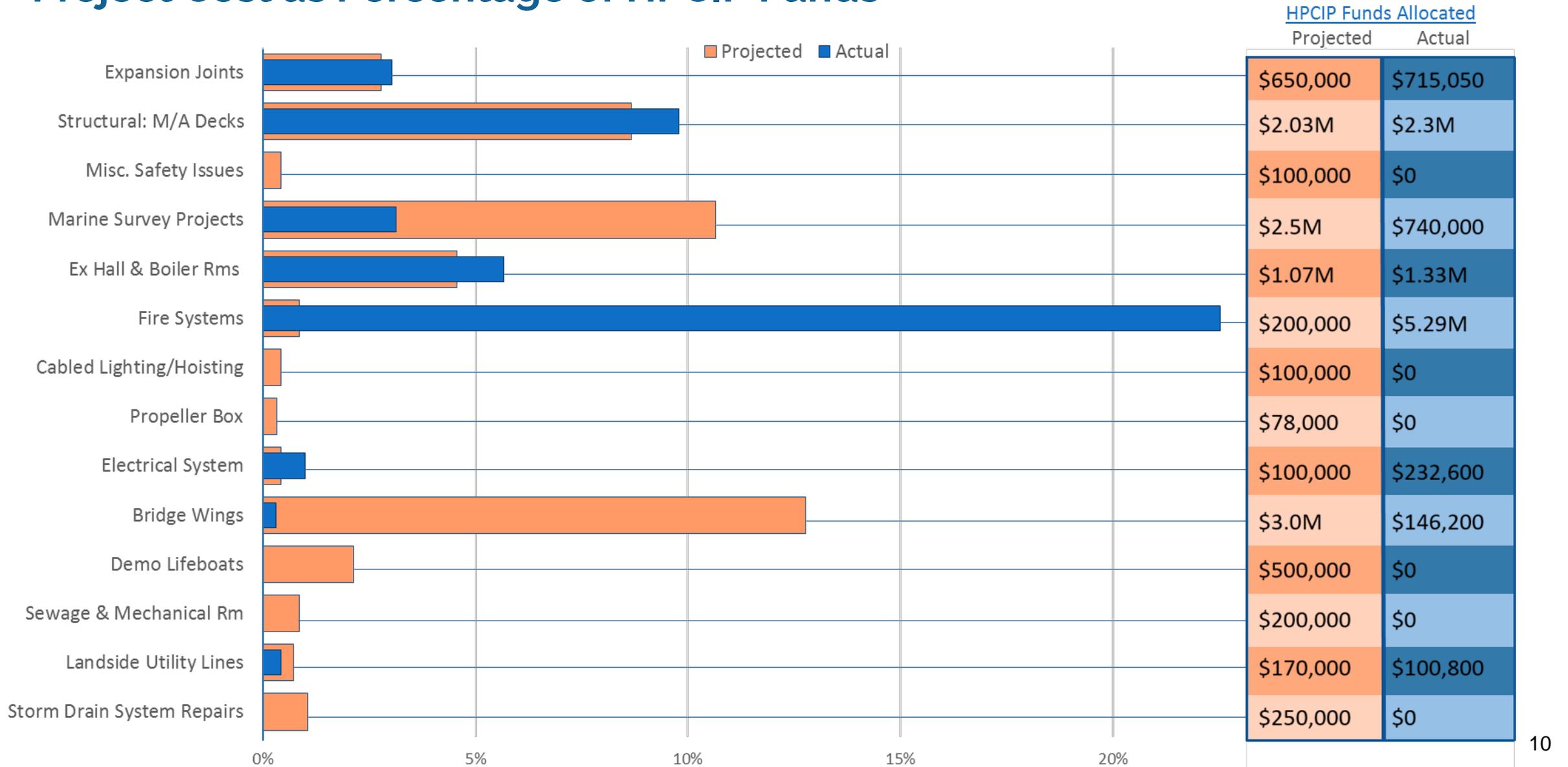
Progress on HPCIP

Complete/To Be Completed	Partially Complete	Work Not Started
Structural: M/A Decks	Top of House Roofing/Deck	Misc. Safety Issues
Fire Systems	Marine Survey Projects	Cabled Lighting/Hoisting System
Exhibit Hall & Boiler Rooms	Electrical System	Prop Box
Expansion Joints	Side Shell/Bridge Wings	Demo Lifeboats
Exterior Hull Paint & Rust Repair	Landside Utility Lines	Relocate Sewage & Mechanical Room
Exterior TOH Paint & Rust Repair	Storm Drain System	Bilge System
Side Tanks at Exhibit Hall	TOH Hand Fence & Railing	Replace Lifeboats
	Domestic Water Line	Exhibit Hall Floor Rebuild
	Sewer System	Health Dept. Upgrades
	Condensate Pump System	
	HVAC Repairs	

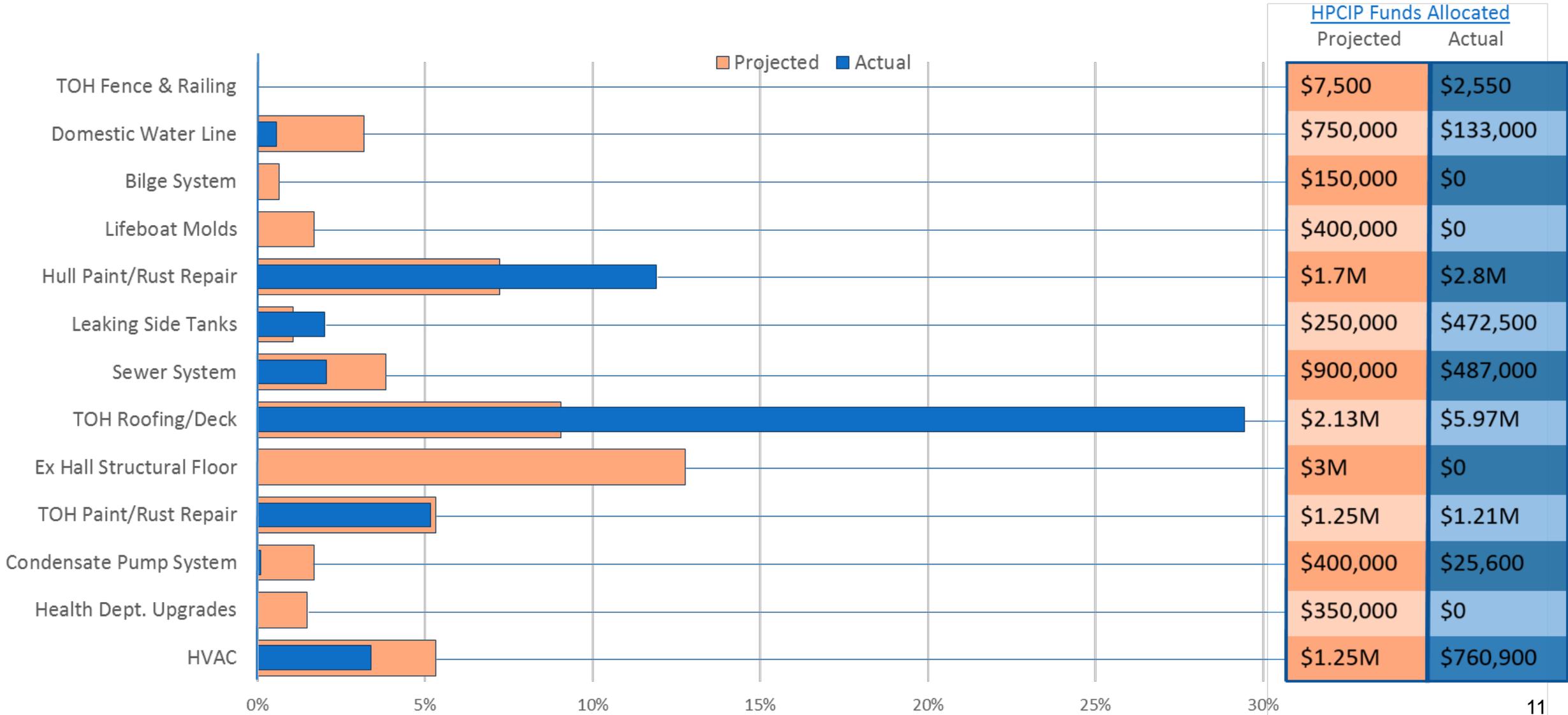
Progress on Needed Repairs

Marine Survey: Suggested First Steps of Repair (Table 5)	
Action	Status
Further engineering and investigation	<p>In progress</p> <p>→ Investigation of double bottom ongoing</p> <p><u>Complete</u>: Structural analysis performed and recommendations received; ship stability surveyed and modeled; HVAC and domestic water line systems inspected and recommendations received; cable stays investigated, repairs specified</p>
Urgent top-side repairs	Substantially Complete
Sewage system repairs and bilge replacement	Partially Complete : Temporary sewage tanks installed, plans drawn; temporary bilge pumps secured and standing water removed
Restore to operation aft engine-room watertight compartment doors	Project Canceled : Structural engineer's analysis and recommendations indicate that completing work could be detrimental in event of hull puncture

Project Cost as Percentage of HPCIP Funds



Project Cost as Percentage of HPCIP Funds



Urgent/Mid-Term

Roofing and Deck Repairs

- To address water intrusion originating at the Top of House areas of ship.
- Before repairs could begin, severe storm in Winter 2017 inflicted significant damage
 - Closure of Sir Winston's Restaurant & Lounge, The Captain's Quarters, Wheel House & more
- Areas repaired include:
 - Cunard Room
 - Captain's Quarters
 - Executive Offices
 - Executive Office Roof
 - Bridge and M Deck
 - Frame 200



Storm damage at Sir Winston's

TOH Roofing/Deck



Roofing and Deck Repairs

Work included:

- Roofs replaced and restored
- Rotting and leaking decks replaced
- Interior of spaces rebuilt



Roof damage and repair/waterproofing on Bridge deck (above Captain's Quarters)

Roofing and Deck Repair Areas



~9,000 SF – New decking, incl. new steel substrate and new waterproofing

~15,000 SF – New roofing system, incl. new steel substrate

~7,600 SF – New waterproofing system

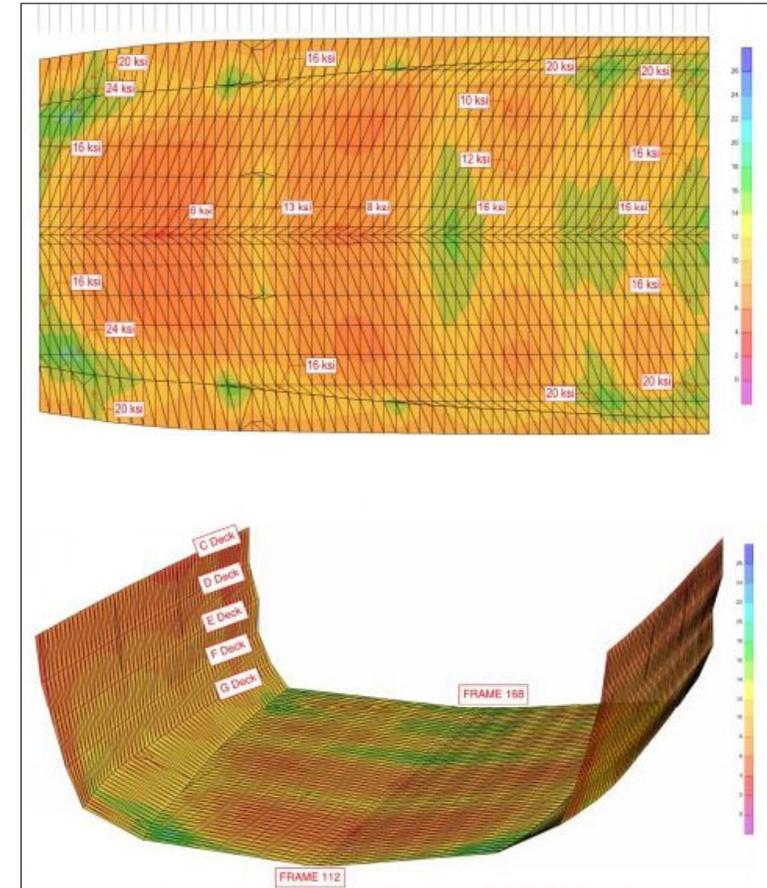
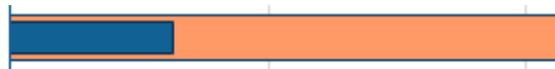
Urgent/Mid-Term



Miscellaneous Marine Survey Projects

- Structural analysis of girders in bottom tank
 - Girders revealed to be in good condition
- Tank top & side tank repairs
- Leak repair
- Watertight bulkhead doors assessed

Marine Survey Projects



Modeling showed hull stresses within normal range

Urgent

Sewer System Repairs

- Temporary sewage tanks installed
 - Wing and bottom tanks drained, cleaned, taken off-line
- Plumbing line repairs
- Water removed from hull, area cleaned and sanitized



New temporary sewage tanks



HVAC Repairs

Urgent/Mid-Term

- Contractor inspected systems, prepared recommendations
- New systems installed to eliminate top-of-house leaks
- Other repairs made at Exhibit Hall and King George Room



HVAC installation at Frame 200, top of house



Mid-term

Exterior Hull Paint and Rust Repair

- Structural integrity compromised due to exposed and rusted metal
- Rust remediated, inhibitor applied and 240,000 square feet of hull primed and painted
- Restored to original and historic colors



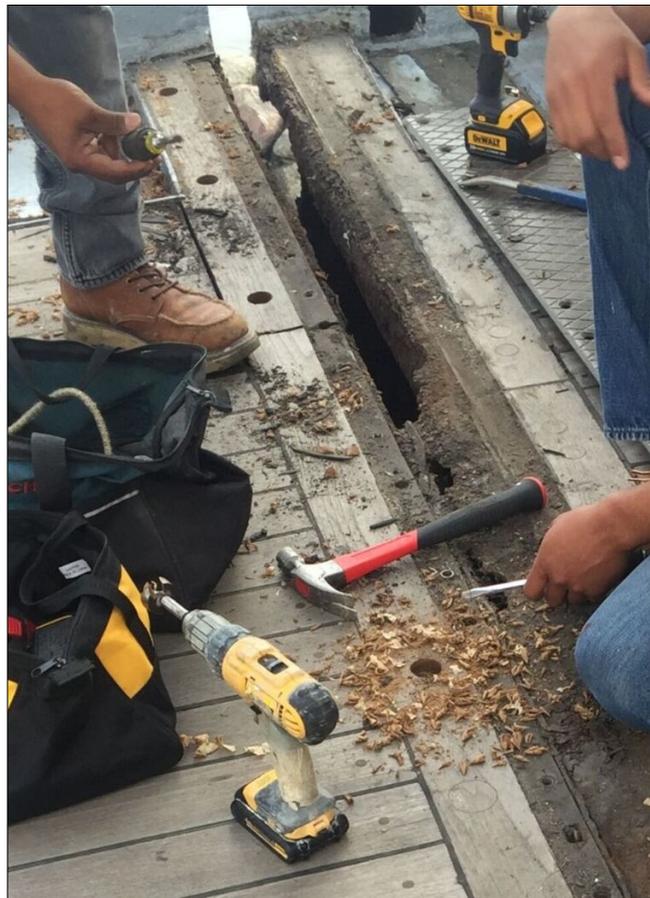
Hull painting in progress



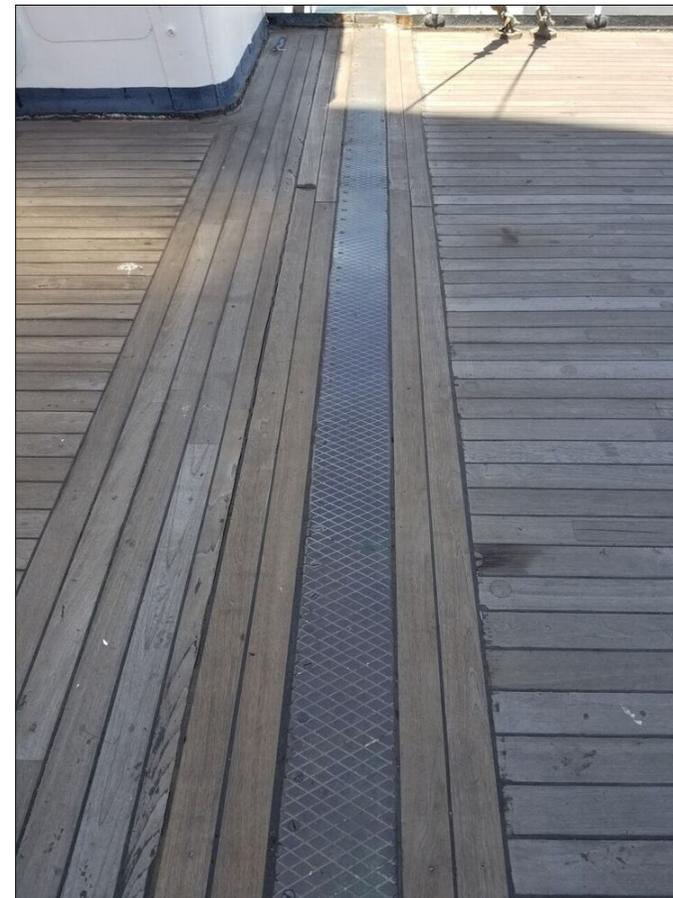
Urgent/Mid-Term

Expansion Joint Replacement

- Identified as urgent item
- All 3 expansion joints were severely corroded, leaking and not structurally sound
- Replacements designed to be historically correct



Before



After



Estimated completion: Oct. 1

Urgent

Repair of Leaking Side Tanks

- Both tanks were leaking onto and under tank tops/lower exhibit floor
 - Caused poor structural conditions
 - Visible holes in interior walls
 - Standing water
- Leak investigation & water removal complete
- Repair in progress



Side tanks repair in progress



Estimated completion: Nov. 14

Top of House Paint & Rust Repair

Mid-term



Intake vents and funnel before



Intake vent and funnel after

TOH Paint/Rust Repair



Estimated completion: March 29

Structural Repairs to M & A Decks

Urgent

- Repairs in the area of Ghosts and Legends attraction
 - Area shut down in April 2016 due to structural issues
 - Marine Survey identified leaks in fiberglass pool as contributing to corrosion of bottom of ship
- Raised floors re-built, now safe to enter and attraction has re-opened



Re-built walkway structure, from above



Exhibit Hall and Boiler Rooms

Urgent

- Demo of raised floor; de-watering, repair and rust abatement



Ex Hall & Boiler Rms



Completed: Sept. 2017



Fire and Life Safety Systems Repair

- \$200,000 originally budgeted, to fund minimal corrections identified by Long Beach Fire Department during 2016 inspection
 - During follow-up inspections, LBFD found significant additional deficiencies
 - Further investigation, repairs, and certifications required
- LBFD classified Queen Mary fire systems as high priority project
 - Implemented augmented response to any fire-related call to Queen Mary
 - Imposed 24-hour fire watch, fulfilled by Urban Commons

Fire Systems



Completed: June 2018

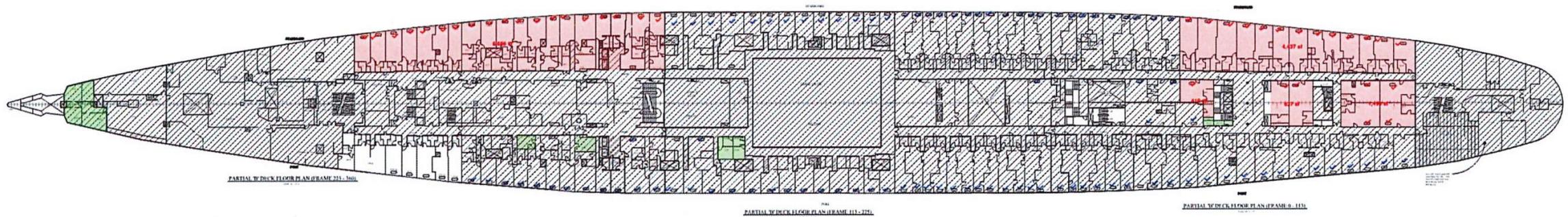
Fire and Life Safety Systems Repair

- ✓ 151 Fire Code Violations Corrected
 - Many, if not all, conditions existed under previous operator
 - ✓ Annual Fire Alarm certification completed
 - ✓ Annual emergency lighting test completed
 - ✓ Annual sprinkler testing completed
- ✓ 5-Year sprinkler testing completed
 - ✓ Fire Water Flex Hoses replaced
 - ✓ Fire Door corrections completed
 - ✓ Major fire protection system repairs completed
 - ✓ Obstructive investigation completed

Fire and Life Safety Systems Repair

Obstructive Investigation Completed

- Sprinkler pipes throughout 1 million square feet of ship inspected, flowed, and repaired
 - 400 guest rooms, public areas, and back-of-house areas
 - All sprinkler heads (5,000) replaced with new quick-response sprinkler heads
- Microbiological testing completed



Visitor Experience Improvements Completed by Urban Commons

- 4-D Theater
- Ellis Island Experience
- Titanic Exhibit
- Winston Churchill “Their Finest Hours” Exhibit
 - Renovations to exhibit space

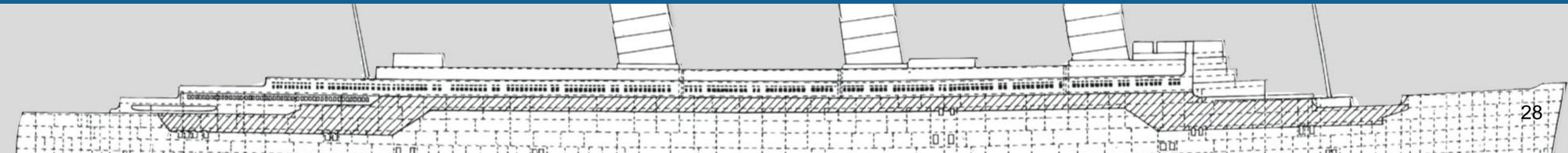


“Their Finest Hours” Exhibit

Improvements to oversight of lease and contract management

Lease Oversight

- Lessee obtains advance City approval
- Stronger internal controls
- New dedicated staff member assists Real Estate Officer
- Improved processes for monthly inspections



Carnival Cruise Line

- Multi-million-dollar renovations to Long Beach Cruise Terminal unveiled in Feb. 2018
- New, 3,954-passenger Carnival Panorama will arrive in 2019



Carnival Panorama



Long Beach Cruise Terminal

Thank you

