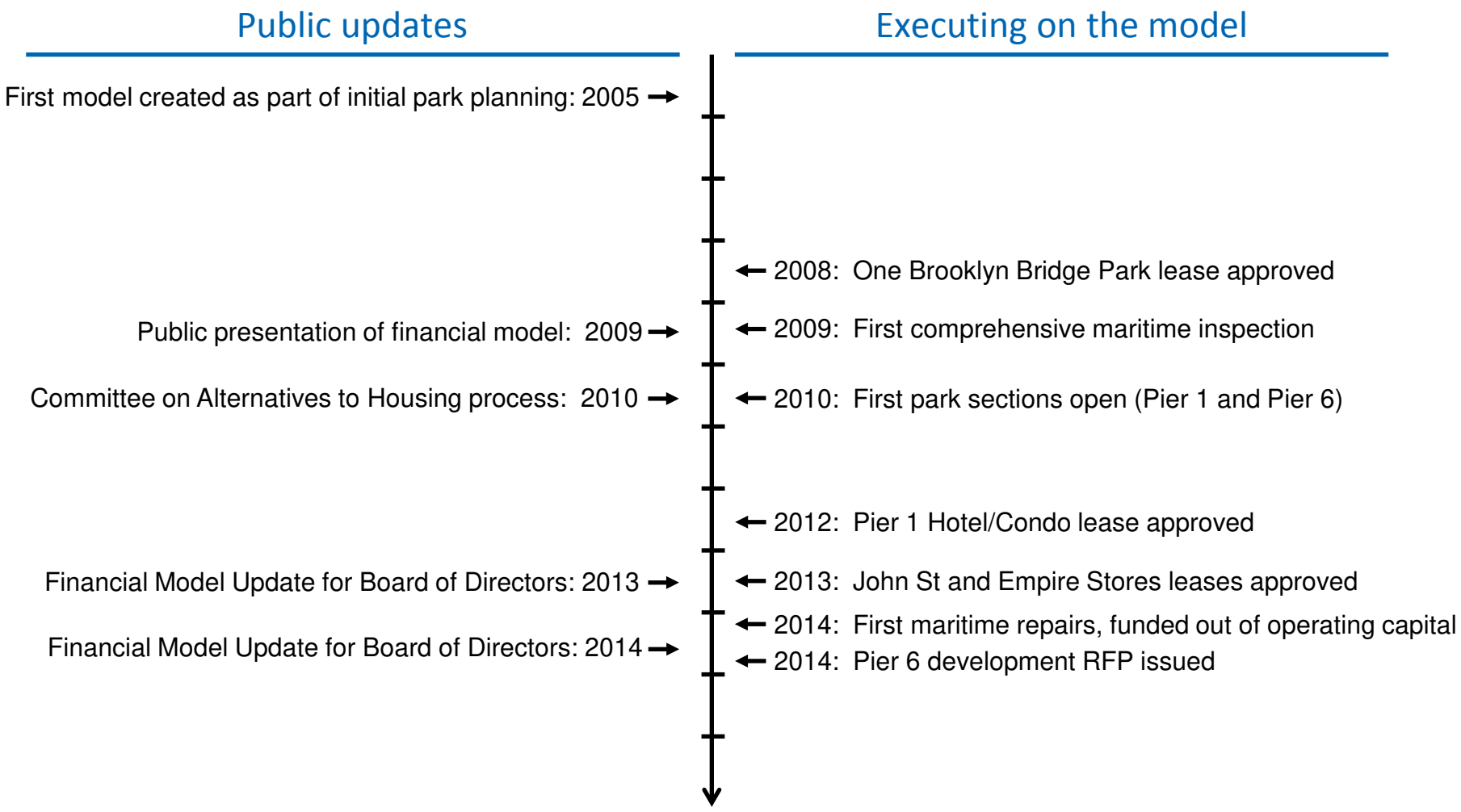
BROOKLYN BRIDGE PARK

Financial Model Update

Board of Directors

June 11, 2015

BBP financial model developed/refined over 10+ years



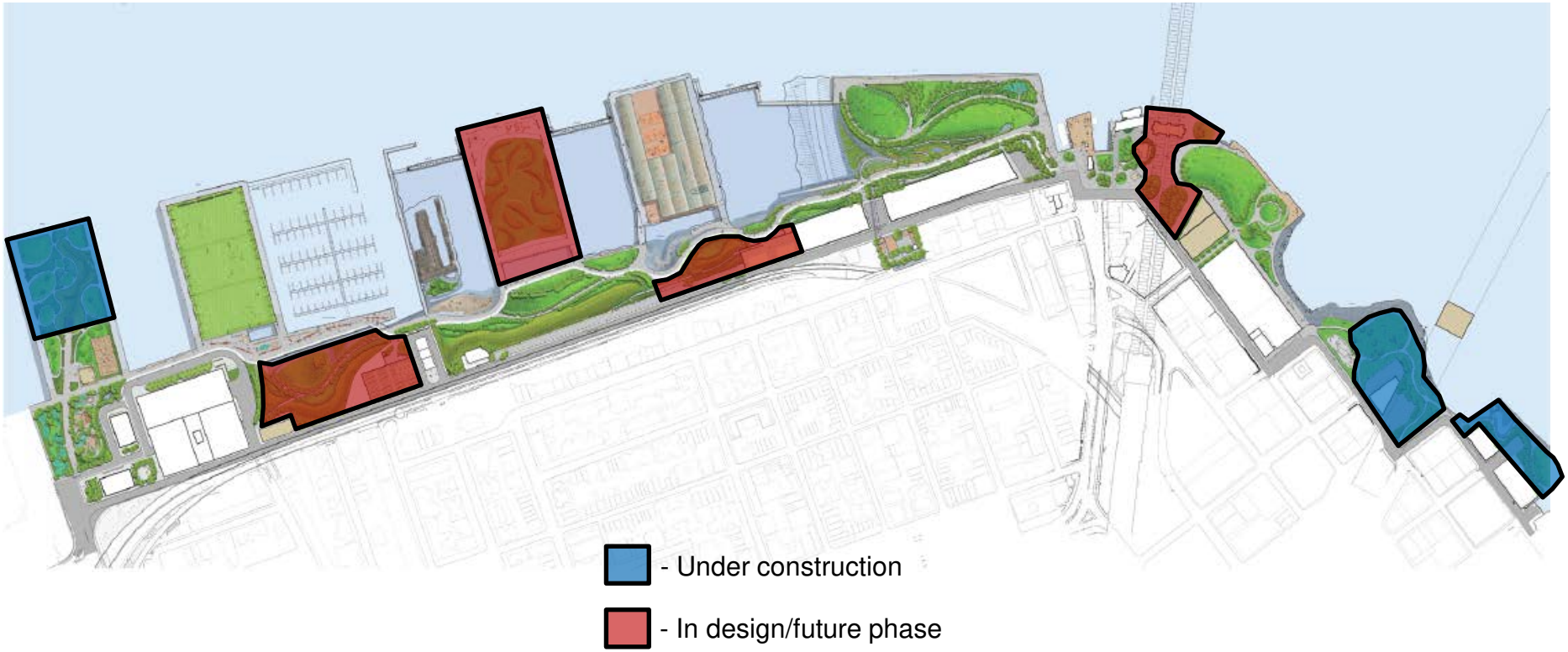
OUTLINE

- **Expenses**
  - **Operating Expenses**
  - **Maritime Maintenance**
  - **Capital Maintenance**

- Revenue

- Cashflow projections

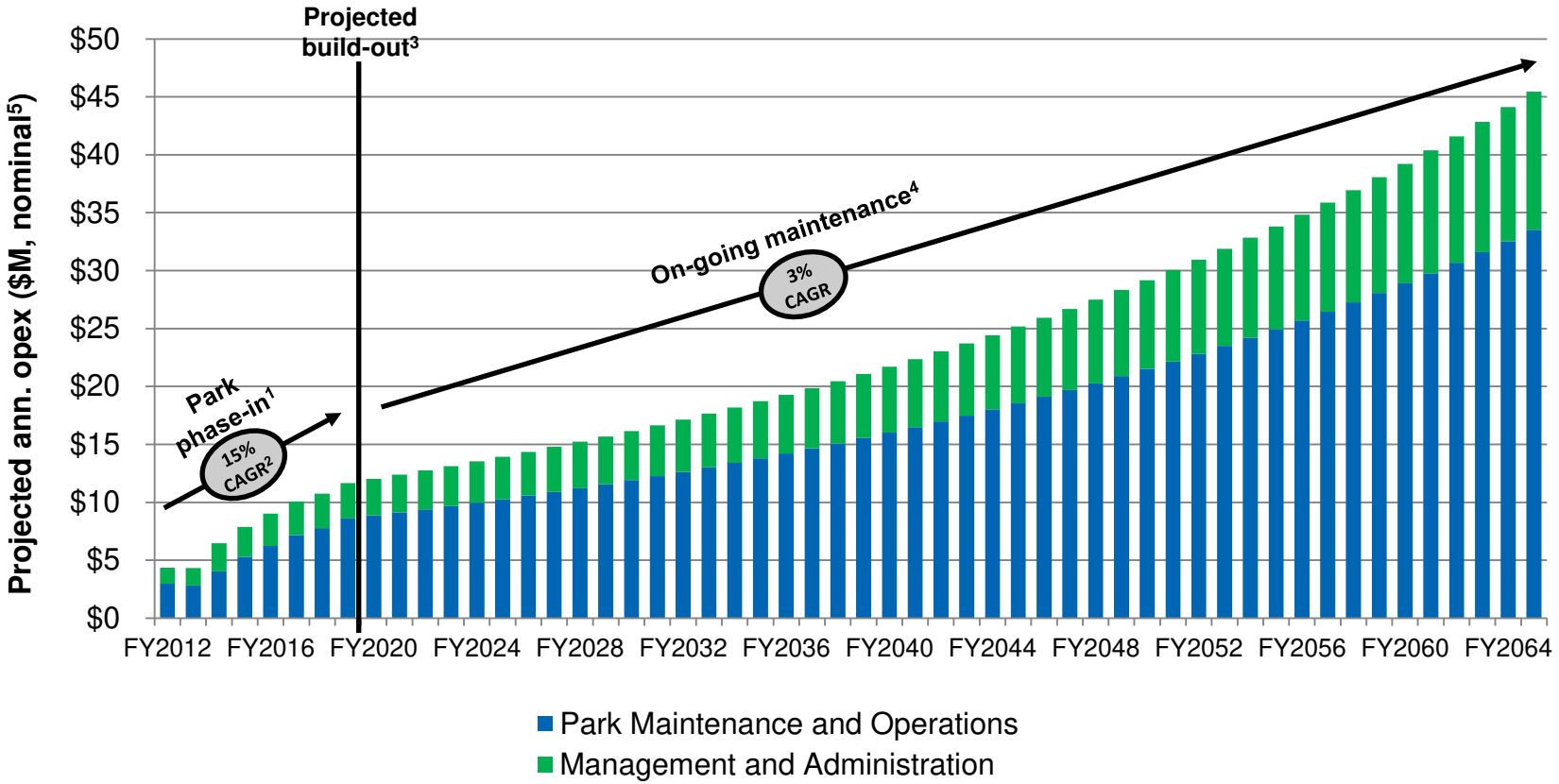
OPERATING EXPENSES:
Park is 65% complete with 10% under construction[1]



1. Numbers are approximate

OPERATING EXPENSES:

After initial park build-out, opex grows with inflation



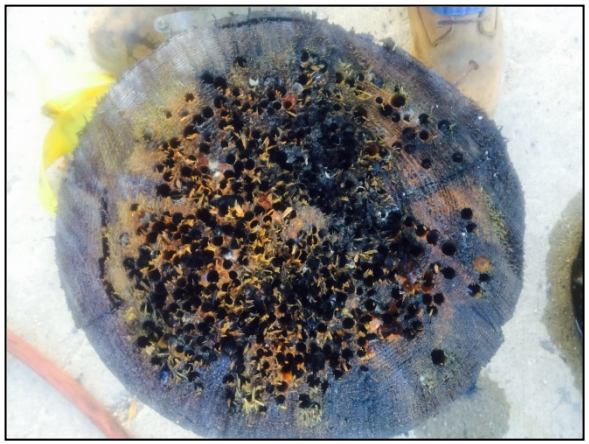
NOTE: FY12 to FY15 derived from approved BBP budgets, FY16 from proposed budget, and FY17 to FY65 from projections

1. Expense growth during "Park phase-in" based on (i) addition of new parkland, (ii) increased visitation at existing parkland, and (iii) projected inflation
2. CAGR=Compound Annual Growth Rate
3. Park construction projected to be completed during FY19
4. Expense growth during "On-going maintenance" projected to be 3% annually, the historical average rate of inflation in the US
5. Nominal values include inflation

MARITIME MAINTENANCE:
Maritime infrastructure is deteriorating

BBP maritime assets[1]

- 13,000 timber piles
- 11,000 concrete extensions
- 4,500 linear ft of bulkheads[2]
- 830,000 SF of concrete pier deck (1/3 of park)
- 3,200 linear ft of riprap or natural shore

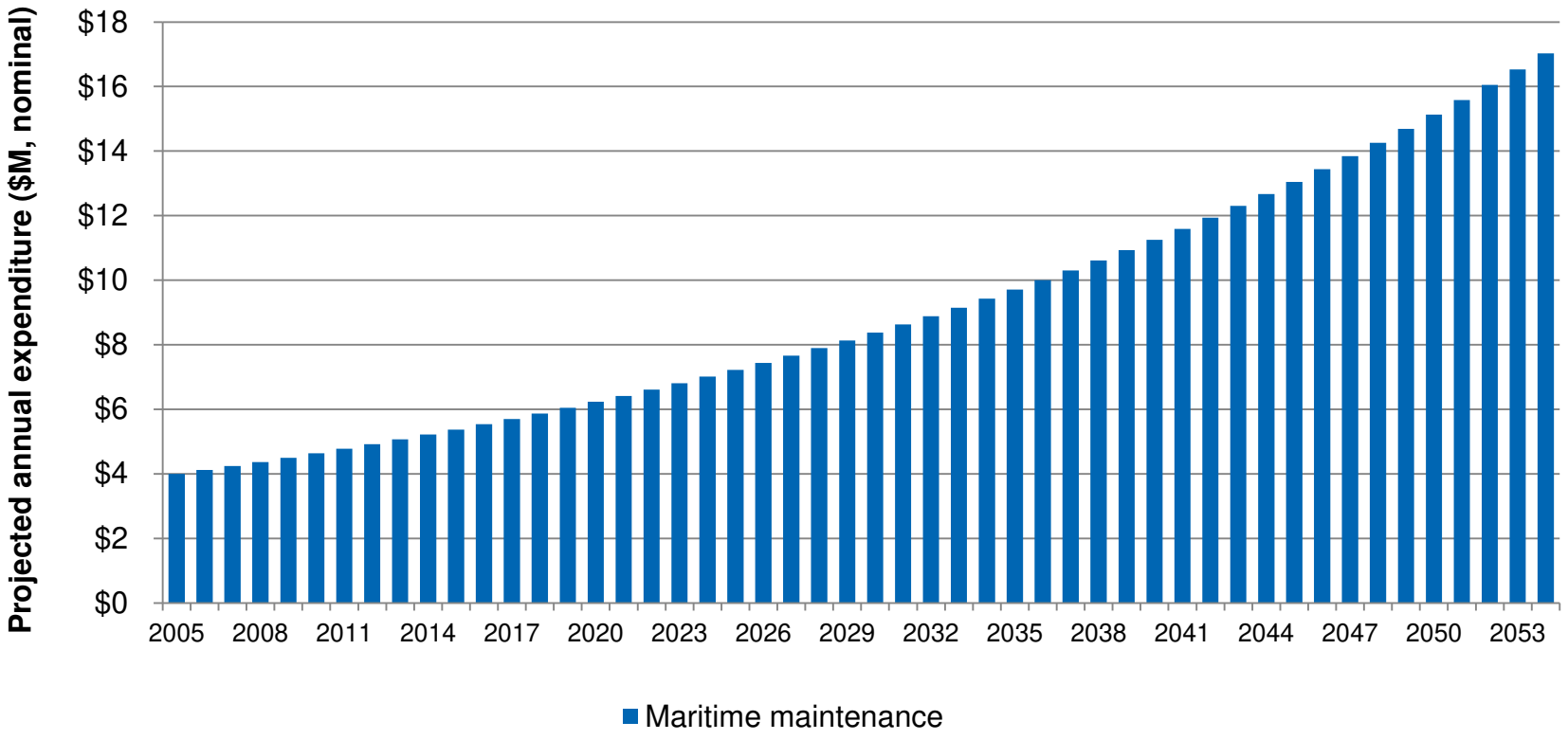


Pier 3 pile cross-section showing marine borer damage

Pier 3 pile cross-section showing marine borer damage

1. Numbers are approximate
2. Concrete and steel

MARITIME MAINTENANCE:
Initial cost estimate from 2005 was simplistic



Total expense over 50 years was $200M (in $2005)
(or $450M in $nominal)

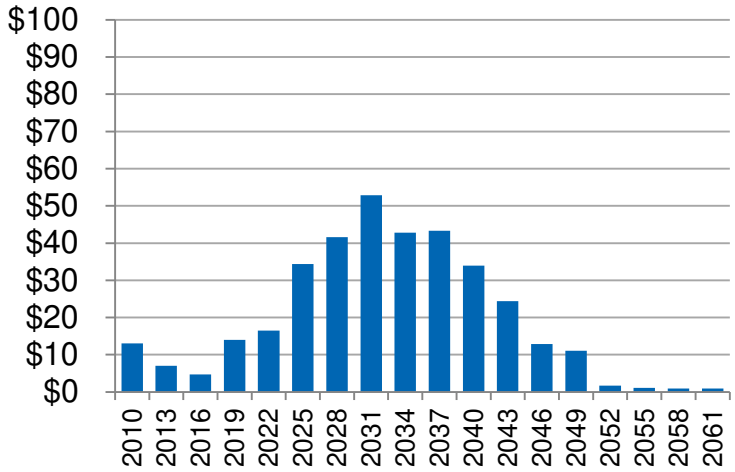
NOTE: Initial financial model from 2005 assumed $200M (real$) of maritime expenses over 50 years; it assumed consistent $4M per year expenses (a straight average), grown with inflation

MARITIME MAINTENANCE:
More refined lifecycle cost model created in 2010

Model inputs

- **Quantity and type of maritime assets**
- **Rate of deterioration**
- **Unit cost for repair ($ per linear foot)**

Projected expenses ($M)[12]



Total expense over 50 years projected to be $200M (in $2010) (or $375M in $nominal)

1. Assumed $700 per linear foot in structural repair costs
2. Dive inspections were projected at ~$220K annually ($2005)

MARITIME MAINTENANCE:
Cost of repairing maritime infrastructure is escalating

Cost increases over previous 5 years

Year	Projected expense over 50 yrs[1]
2010	$200M
2012	$260M
2015	$320M

10% CAGR[4] from 2010 to 2015

Increases driven by unit cost growth[2]

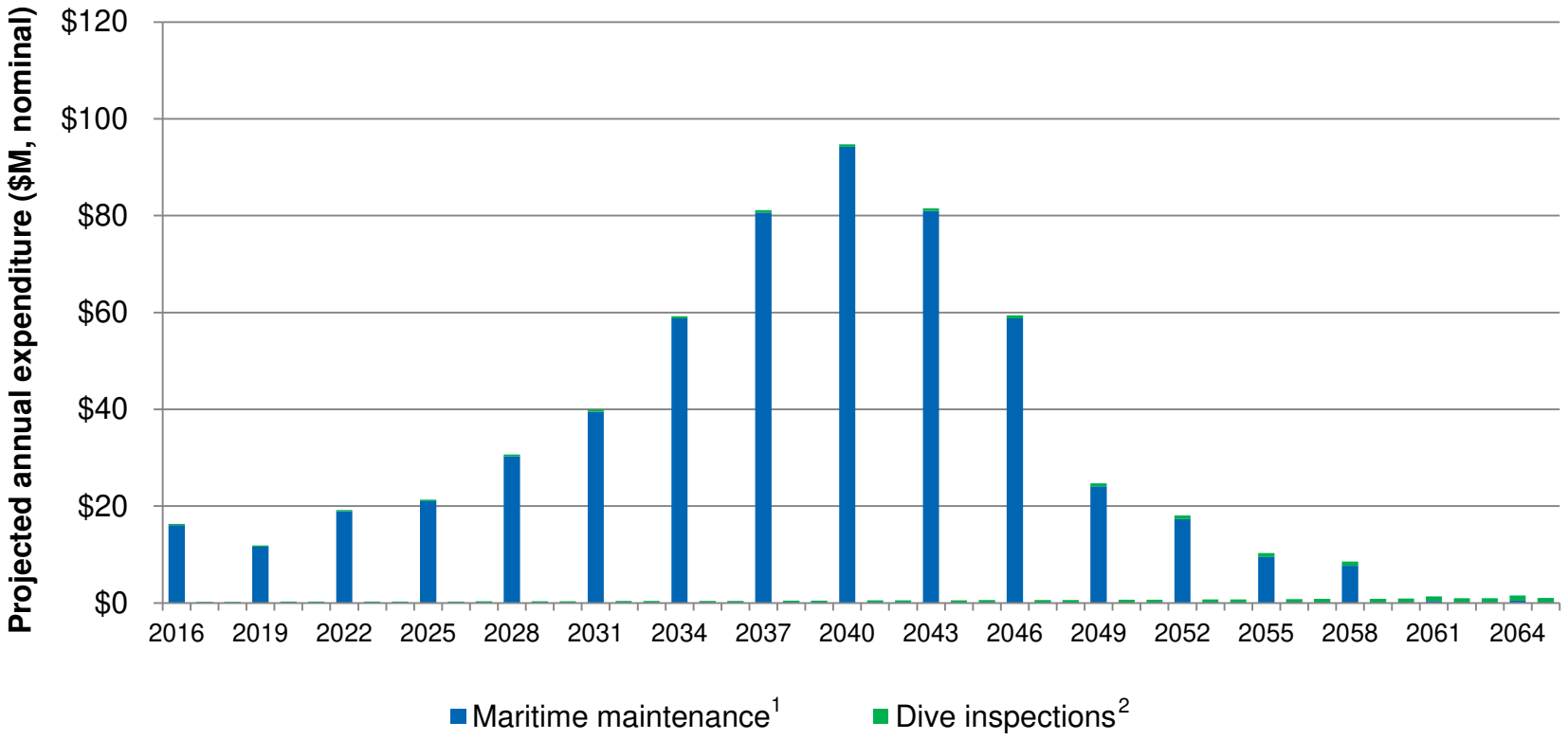
- Steep growth in unit costs for repairs[3]:
  - $700/lin. ft. (2010)
  - $875/lin. ft. (2012)
  - $1,100/lin. ft. (2015
- Growth driven by:
  - Improved local economy
  - Numerous active projects in NY Harbor
  - Limited number of specialty contractors leads to strong pricing power

1. Numbers are in real$ (2010 projection in $2010, 2012 projection in $2012, and 2015 projection in $2015)
2. Project scope and rate of deterioration have remained consistent with earlier projections
3. Unit costs based on awarded marine contracts for BBP work and consistent with regional averages
4. CAGR=Compound Annual Growth Rate

MARITIME MAINTENANCE:
Reactive vs. preventative approach

	Reactive approach	Preventative approach
Approach	• Annual rehabilitation of deteriorated elements only • Remaining non-rehabilitated elements continue to deteriorate	• Encase piles to prevent future deterioration • Repair as many piles upfront as is financially viable
Associated repair	• Steel reinforced concrete encasement (4” to 8” width) • Transfers structural load from pile, to concrete encasement	• ¾” epoxy protective encasement (no reinforcing steel or concrete) • Piles maintain structural capacity

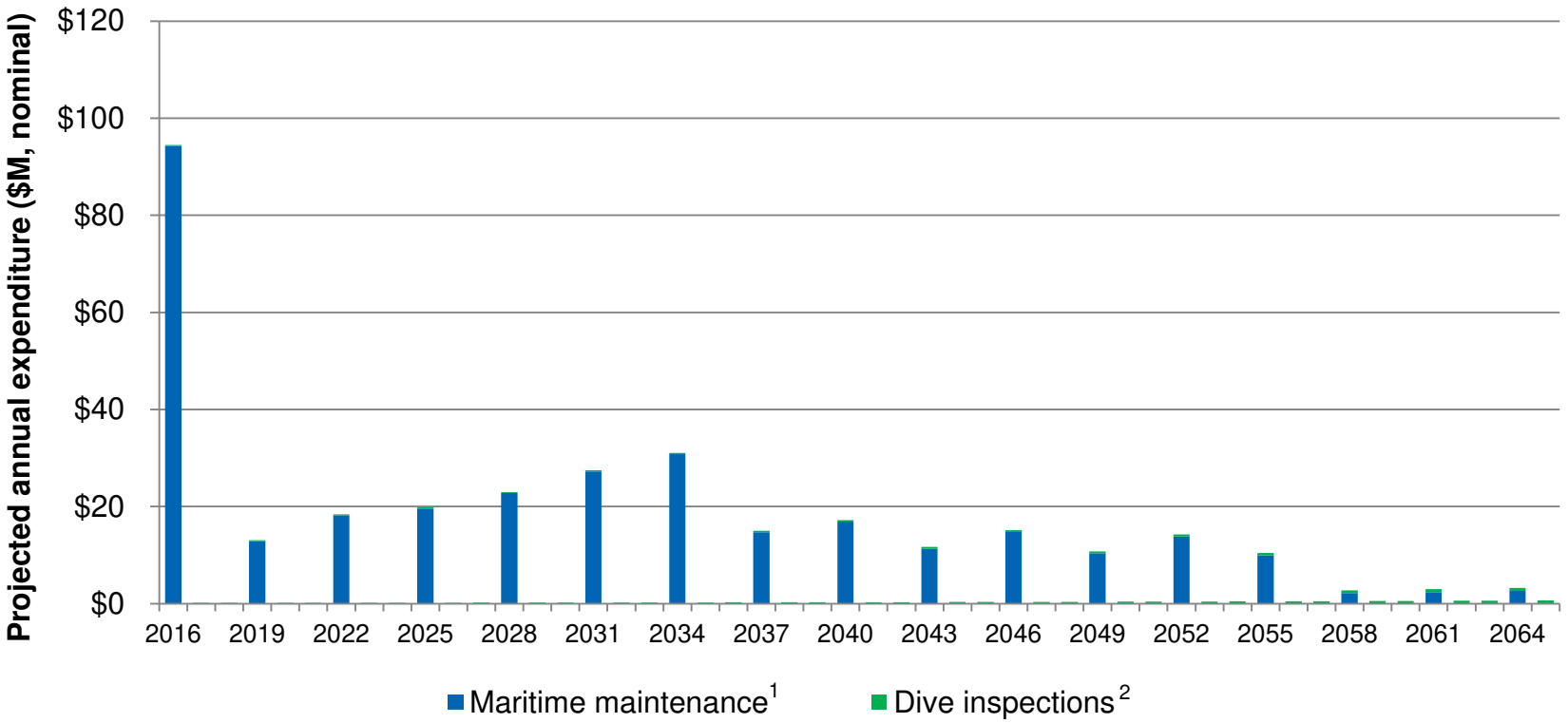
MARITIME MAINTENANCE:
Current expense projection (reactive approach)



Total expense over 50 years is $320M[3] (in $2015)
(or $600M in $nominal)

1. Assumes $1,100 per linear foot in structural repair costs, up from previous cost assumption of $875 per linear foot; grown with inflation of 3% per year
2. Dive inspections are ~$250K annually ($2015) for reactive approach
3. Up from previous estimate of $260M from 2012

MARITIME MAINTENANCE:
Current expense projection (preventative approach)



Total expense over 50 years is $240M[3] (in $2015)
(or $340M in $nominal)

1. Assumes $1,100/linear foot in structural repair (up from $875/lin ft), $525/lin ft in preventative concrete extension repair, and $425/lin ft in preventative pile repair ; grown with inflation of 3% per year
2. Dive inspections are ~$150K annually ($2015) for preventative approach
3. Up from previous estimate of $210M from 2012

MARITIME MAINTENANCE:
Preventative approach has significant advantages

- Cheaper than reactive approach ($80M cheaper in $2015 or $260M in $nominal)
  - Reduced labor costs
  - Less material required
  - Economies of scale in purchasing
- Better for the environment (less fill in East River)
- Less market risk of future cost increases
- Good long-term investment option[1]

Preventative maintenance repair

Reactive maintenance pile repair

1. BBP's investment policy limits investment of BBP funds to low-risk, modest return vehicles; current annual rate of return on these investment vehicles is <1%

CAPITAL MAINTENANCE:
Refinement of capital maintenance expense estimates

2005 estimate	2012 estimate	2015 estimate
Based on industry standards • 1% to 2% of initial construction costs • $130M construction budget	Based on industry standards • 1% to 2% of initial construction costs • $400M construction budget	Based on lifecycle cost model of all BBP assets • Full asset inventory • Useful life of assets • Replacement value
~$2M per year	**~$5M per year**	**~$5M per year**

NOTE: BBP does not receive public funds for on-going capital maintenance

CAPITAL MAINTENANCE:
Lifecycle estimate – illustrative example

1	2	3	4
Identify all park assets	Assign useful life to each asset	Determine replacement value for each asset	Project replacement expenses over 50 years
Pier 5 astroturf (installed FY2012)	10 year life	$800K[1]	Replacement needed in FY22, FY32, FY42 etc.

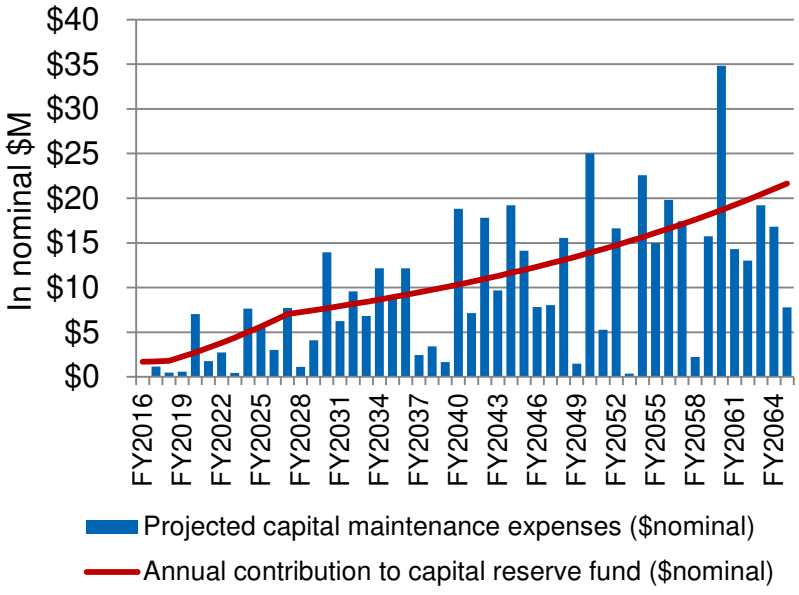
1.In $2015; model assumes 3% annual cost inflation

CAPITAL MAINTENANCE:
All BBP assets used to project future expenses

180+ asset groups identified

Artificial Turf	Paving / Chip Seal
Beaches (Pier 4 and Main St)	Picnic Grills
Benches (slats, supports)	Picnic Tables / Umbrellas
Boardwalk at EFF	Pier 2 Court Surface
Bouldering Wall	Plantings and Lawns
Buildings	Playground Equipment
Dog Run Surfaces	Playground Surfaces
Exercise Equipment	Range Fence
Ferry Dock at Pier 6	Retention Tanks
Floating Dock at Pier 2	Rink Surface
Irrigation (pumps, lines)	Shade Sails
Lights (poles, fixtures)	Sports Netting
Loop Road + parking lot	Squibb Bridge
Marine Fence	Steel Shed Structure
Overwater bridges (7 in total)	Vehicles

Projected capital maintenance expenses



Average of ~$5M ($2015) per year

NOTE: Above list of assets not comprehensive

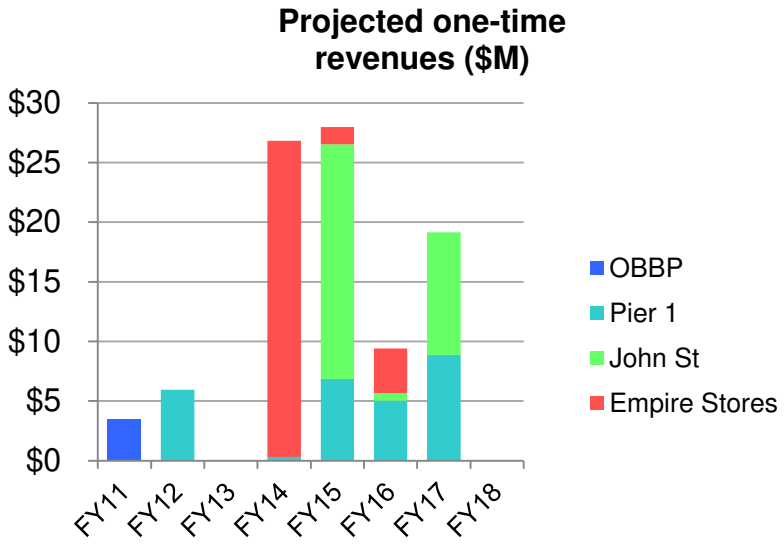
OUTLINE

- Expenses
- **Revenue**
  - **One-time Revenue**
  - **Recurring Revenue**
- Cashflow projections

ONE-TIME REVENUES:
Revenues from upfront rent, PILOST[1], and PILOMRT[2]

Projected one-time revenue

Site	One-time rev ($M)
One Brooklyn Bridge Park	$4
Pier 1	$27
John Street[3]	$31
Empire Stores	$32
TOTAL	**$93**



1. PILOT=Payment in Lieu of Sales Tax
2. PILOMRT=Payment in Lieu of Mortgage Recording Tax
3. Includes estimated $10M in participation rent on initial sales

RECURRING REVENUE: Model assumptions

Revenue variables	Assumptions
PILOT amount	**Resi:** Based on DOF market values for comparable buildings[1] **Comm:** Based on projected NOI[2] of each project
PILOT growth rate	**3% annual growth in DOF market value[3]**
Ground rent amount	**Defined in leases**
Ground rent growth rate	**Defined in leases**

Site	Annual rent	Growth rt (per yr)
OBBP	$1.4M	3.0%
Pier 1	$0.8M	~1.8%[4]
John Street	$0.2M	3.0%
Empire Stores	$1.6M	2.3%
Marina	$0.3M	2.0%

Projected recurring revenue

	Rev. per year ($2015 in M)[5]
OBBP	$2.3
Pier 1[6]	$3.2
John St.[7]	$1.0
Empire Stores[6]	$2.7
Other[8]	$1.7
TOTAL	**$10.9**

1. DOF=Dept of Finance; ~$120/SF for Pier 1 residential, John St, and OBBP
2. NOI=Net Operating Income
3. Based on historical annual rate of inflation in US
4. Growth rate is 7.5% every 5 years
5. Projected revenue based on first stabilized year of each asset
6. Participation for Pier 1 hotel and Empire Stores assumed to be zero; current projections suggest project revenue and profit thresholds will not be met
7. Includes ~$200K per year in annual Park Transfer Fee beginning in FY2020
8. Includes revenues from marina, concessions, parking, permits, and events

NOTE: Model assumes current tax rates (10.684% for commercial and 12.855% for multifamily residential) in all future fiscal years

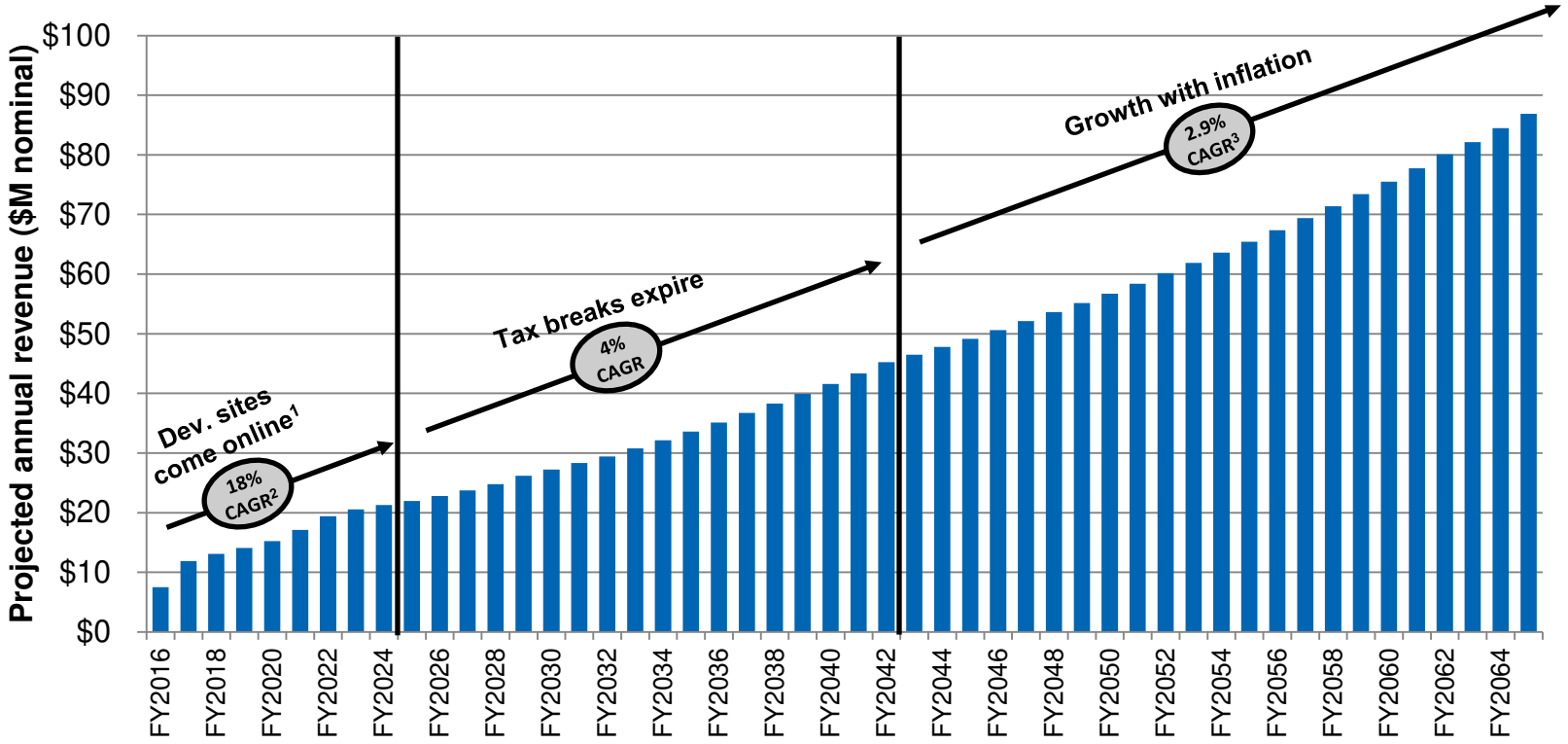
RECURRING REVENUE:
Expiration of tax abatements

	Type	Length of full abatement	Length of phase out	Abatement expires	Additional rev. to BBP at expiration ($2015 in M)[2]
OBBP (residential)	J-51	10 yrs	5 yrs	2024	$4.0
OBBP (commercial)	ICIP	15 yrs	10 yrs	2034	$0.7
Empire Stores	ICAP	15 yrs[1]	10 yrs[1]	2042	$1.9
Pier 1 hotel	ICAP	15 yrs	10 yrs	2042	$1.7

NOTE: Years are fiscal years; Empire Stores and Pier 1 hotel abatements have not yet been granted, therefore abatement expirations are projections

1. Only applies to office space and first 10% of building's retail; all retail over 10% of total building size has a 10 year full abatement and 5 year partial abatement
2. All values are projections based on projected future DOF valuations; Source: BBP

RECURRING REVENUE:
Growth driven by expiring tax breaks, inflation

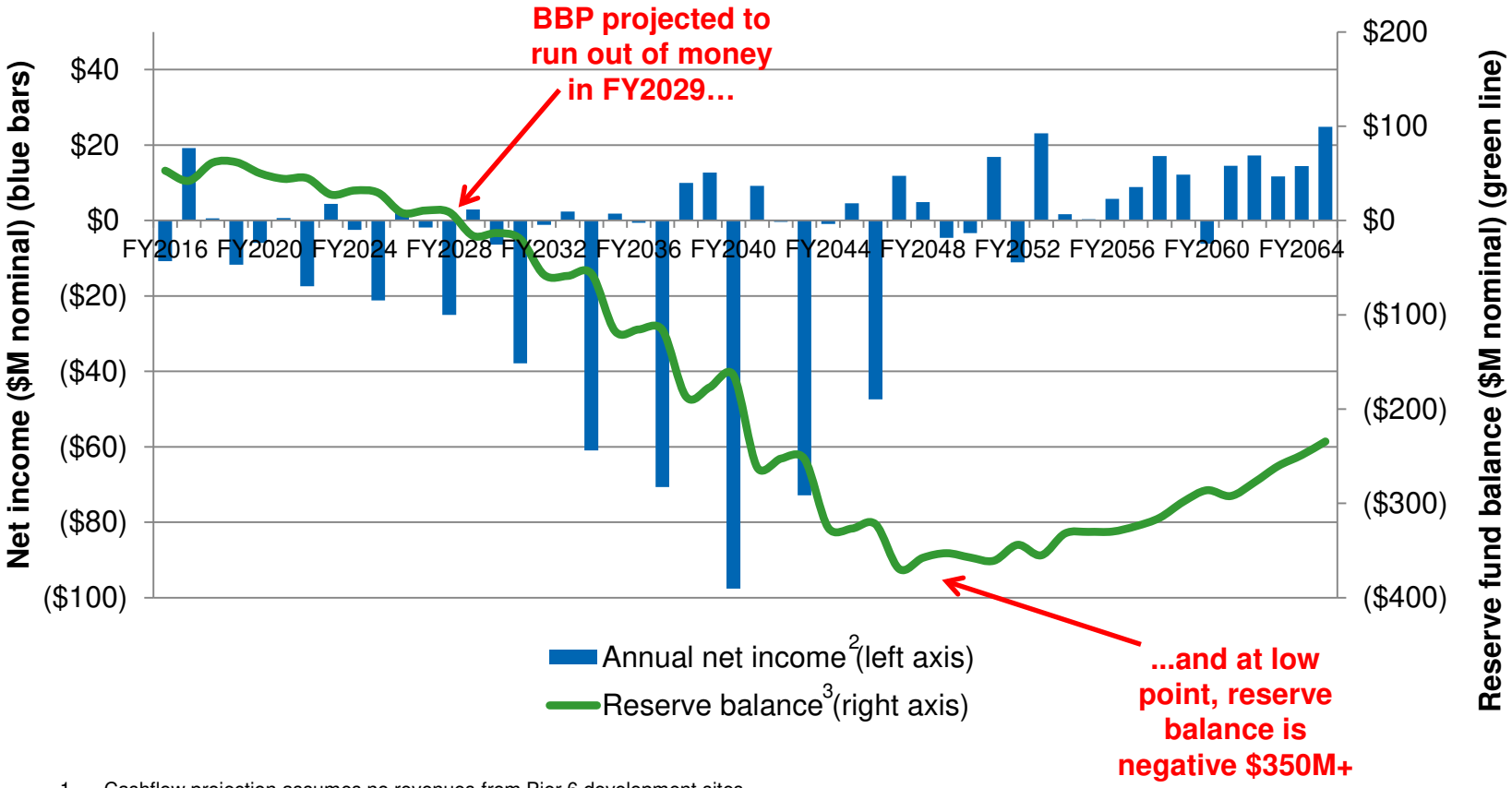


1. Growth driven by commencement of ground rent and by PILOT values increasing as buildings are constructed and occupied
2. CAGR=Compound Annual Growth Rate
3. Assumes 3% inflation of PILOT, defined escalation terms on ground leases as shown in previous slide

OUTLINE

- Expenses
- Revenue
- **Cashflow projections**

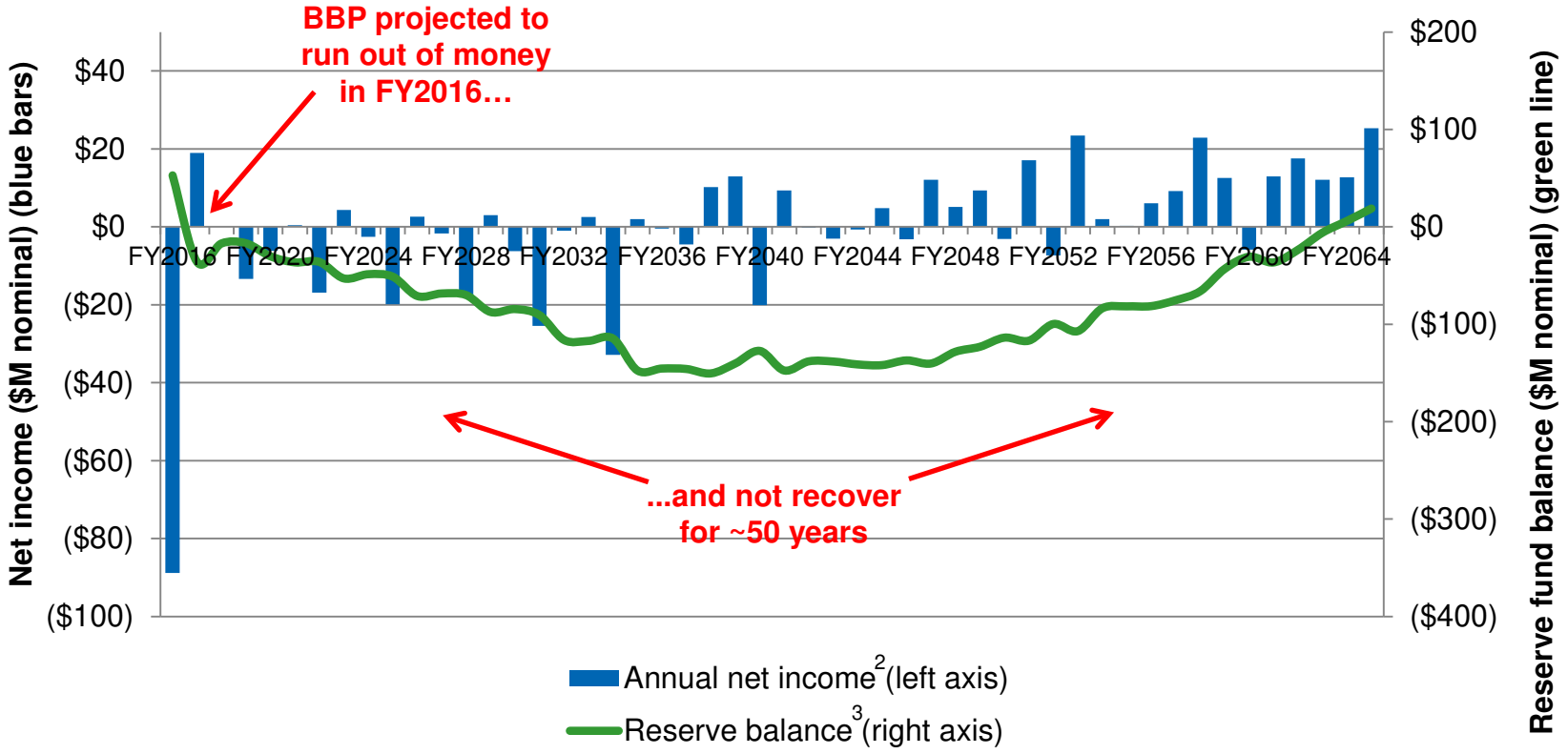
CASHFLOW PROJECTION:
Assuming no Pier 6[1] (reactive maritime approach)



1. Cashflow projection assumes no revenues from Pier 6 development sites
2. Includes all projected expenses (opex, maritime, and capital maint.) and all projected revenues (one-time, recurring, and rev from abatement expirations)
3. "Reserve balance" is aggregate beginning balance of operating, capital maintenance, and maritime maintenance reserve funds in any given year

NOTE: Cost of borrowing during negative "Reserve fund balance" years not included

CASHFLOW PROJECTION:
Assuming no Pier 6[1] (preventative maritime approach)



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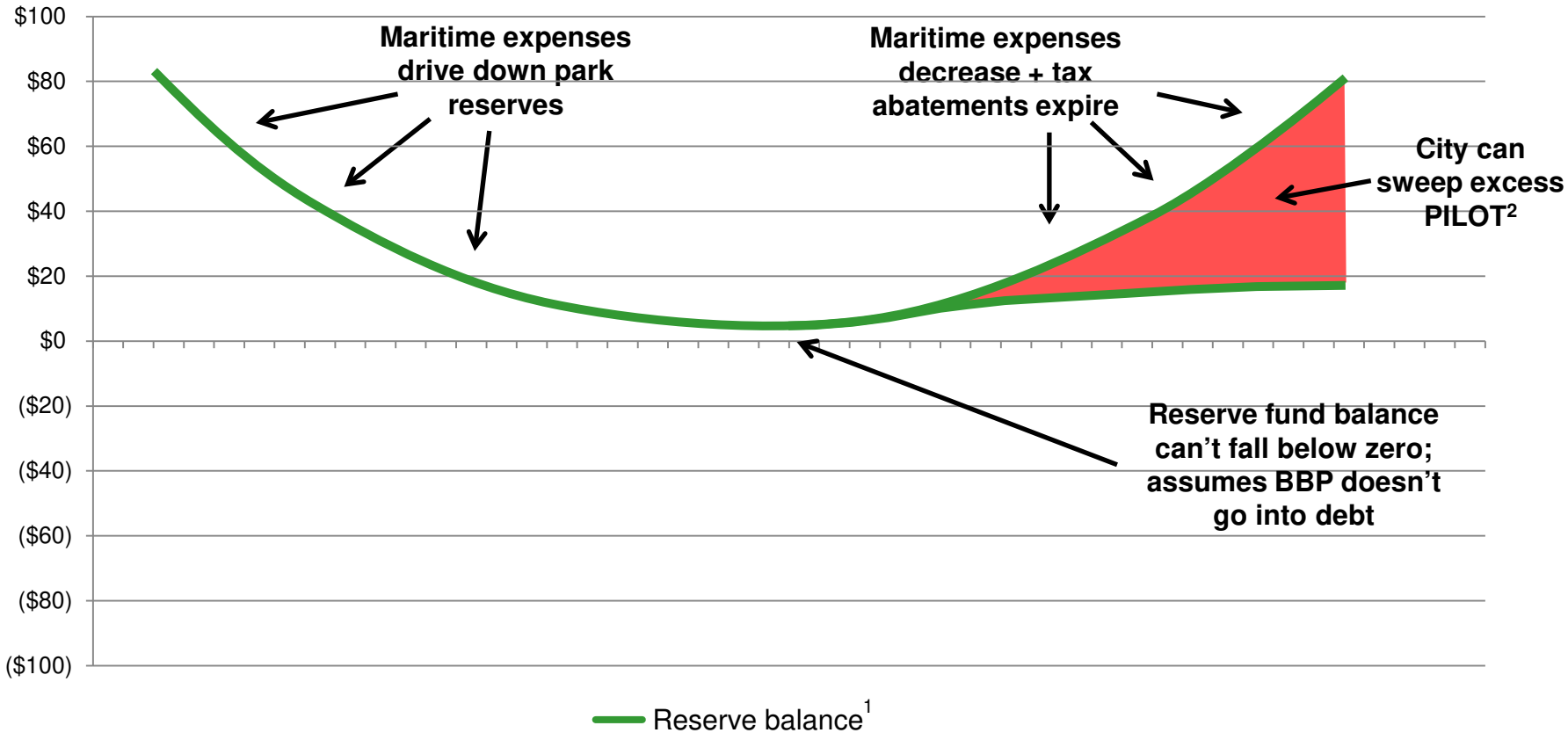
CASHFLOW PROJECTION:
What does a self-sustaining park look like?



NOTE: For illustrative purposes only; does not represent a real projection

1. "Reserve balance" is aggregate beginning balance of operating, capital maintenance, and maritime maintenance reserve funds in any given year
2. 2006 PILOT legislation allows City to sweep excess PILOT funds after FY2026

Conclusion

- Model has long history and has been publicly vetted over 10+ years
- BBP constantly refining model assumptions to reflect latest on-the-ground realities and market dynamics
- Despite major economic changes over past decade, current projections are still largely in-line with originally conceived financial plan
- Revenues from Pier 6 development sites are essential to BBP's financial solvency