Potomac Yard Metrorail Station Financial Feasibility Analysis Update

Final Report – All Alternatives and Design Option B-CSX

City of Alexandria, Virginia

October 2014

PARSONS BRINCKERHOFF

Executive Summary and Key Findings

- The objectives of this study are to update the financial viability of four proposed alternatives that are under consideration in the EIS (known as Alternatives A, B, and D and Design Option B-CSX); and evaluate the impacts to the Potomac Yard tax base growth in revenues, potential developer contributions, and special tax district revenues for each alternative.
- This update includes a new design refinement of Alternative B, referred to herein as Design Option B-CSX and described in more detail in later sections.
- This analysis uses updated land use inputs that are based on current land use development approval and conservative financial assumptions.
- The estimated total capital costs for each alternative, based on 85% of the high-end cost range, are as follows:
  - Alternative A: $209 million
  - Alternative B: $268 million
  - Design Option B-CSX: $351 million
  - Alternative D: $492 million
- This proposed financing plan is based on the net revenues generated by Potomac Yard development; it assumes that existing tax revenues and new revenues needed to support city and school public service demands from the proposed development will go into the City's General Fund to support the services required for the new development.
- The analysis finds that:
  - **Alternative A** has positive cash flow that exceeds its debt service and operating costs for the majority of the forecast period. Additional funding will need to be identified to cover a small, $1.4 million amount in 2019. Relatively lower development build out yields materially less tax revenue gain over time, but Alternative A ranks best among the four alternatives in cost vs revenue comparison.
  - **Alternative B** has positive cash flow that exceeds its debt service and operating costs with no funding gap over the forecast period. Having the highest development buildout, Alternative B yields the most tax revenue, and even with higher construction costs, it yields the most net tax revenue gain over time of any alternative.
  - **Design Option B-CSX**, with the assistance of a construction date of three years after the other alternatives, has positive cash flow that exceeds its debt service and operating costs with no funding gap over the forecast period. It has a higher cost to construct than Alternatives A and B and produces more net tax gain than Alternative A but materially less net tax gain than Alternative B. Loss of significant development opportunity due to the relocation of the CSX tracks to developable property contributes to this lesser tax gain.
  - **Alternative D** has a large funding gap that exceeds its debt service and operating costs for ten years. Alternative D has the largest construction cost of any of the alternatives and significantly lower net tax revenues over time than Alternative B and B-CSX. Alternative D is not financially feasible.
  - The analysis of cost of each of the stations in comparison with the net present value of the revenues generated by each of the alternatives results in the following revenue-to-cost ratios and rankings:
    - Alternative A: 3.52
    - Alternative B: 3.31
    - Design Option B-CSX: 1.96
    - Alternative D: 0.83
- All of the scenarios will result in an increased Metrorail operating subsidy cost to the City of approximately $1.3 million per year, based on WMATA's Metrorail subsidy formula. This analysis assumes that the incremental subsidy requirements would be funded out of revenues generated by Potomac Yard development.
- This analysis does not assume any additional sources of Federal, state, or regional NVTA funding; however the City will continue to actively seek these sources of funds, such as financing support through USDOT's TIFIA loan program, federal TIGER grants, or funding through NVTA's future CIPs.

Project Background and Objectives

- The City of Alexandria (City) and the Washington Metropolitan Area Transit Authority (WMATA) are in the planning stages of considering a new Metrorail Station at Potomac Yard.
- At this time, the City, WMATA, and various federal agencies are engaged in an EIS study process which will result in a "build" or "no build" alternative being selected.
- The City's adopted plan is to fund the station using only new revenue generated by new development in the Potomac Yard Landbays F, G, H, I , J, and L after January 1, 2011. Federal, state, and NVTA funding will be sought but, given funding uncertainties, are not being projected definite sources in this analysis.
- To account for and manage the revenues collected for the station, the City has created the Potomac Yard Metrorail Station Fund (Station Fund).
- Revenue that would be deposited into the Station Fund would be generated from the following sources:
  - Net new property and local taxes associated with new development after January 1, 2011;
  - Special tax assessments on property within two defined land areas in the vicinity of the proposed station;
  - Significant developer contributions in two of the four scenarios (B, B-CSX).
- As part of this process, four alternative station locations have been identified and are defined as Alternatives A, B, and D and Design Option B-CSX.
- In light of the above, the objectives of this study are the following:
  - Analyze the financial viability and cash flow of the four locations under consideration;
  - Evaluate impacts to the density, potential developer contributions, special tax district revenues, and Potomac Yard tax base growth revenues for each location;
  - Work with WMATA and the City to develop a common set of financial performance metrics to evaluate each location.

Scope of Financial Feasibility Analysis Update

In light of the project background and objectives, Parsons Brinckerhoff conducted the following analytical tasks:

- Updated the financial analysis conducted for the *Potomac Yard Development Study* conducted in late 2009 and early 2010 which culminated in the adoption of new zoning for Landbay F and memoranda of understanding (MOU) with the Landbay F development team (also known as CPYR, as well as PYD and MRP, who are the master developers of most of the balance of Potomac Yard land), and other related actions by the Alexandria City Council.
- Updated the follow-up analysis conducted in 2012.
- Reviewed and updated all assumptions regarding:
  - revenues from net new property and local taxes;
  - revenues from special tax districts;
  - developer contributions primarily in Alternative B and Design Option B-CSX;
  - station costs for each location;
  - Impact on the City's share of WMATA's Metrorail operating and capital improvement subsidies;
  - debt structure and financing assumptions.
- Coordinated with City to incorporate new development buildout forecasts for the proposed mix of land uses, including amount, timing, and values of planned residential, office, retail, and hospitality land uses.
- Developed financial performance metrics for the proposed alternatives and design option.
- Compared the financial viability and impacts of each alternative and design option.
- Developed this Final Report with the following sections:
  - Key Findings;
  - Cost and Financing Assumptions;
  - Revenue Assumptions;
  - Development Assumptions;
  - Technical Appendix.

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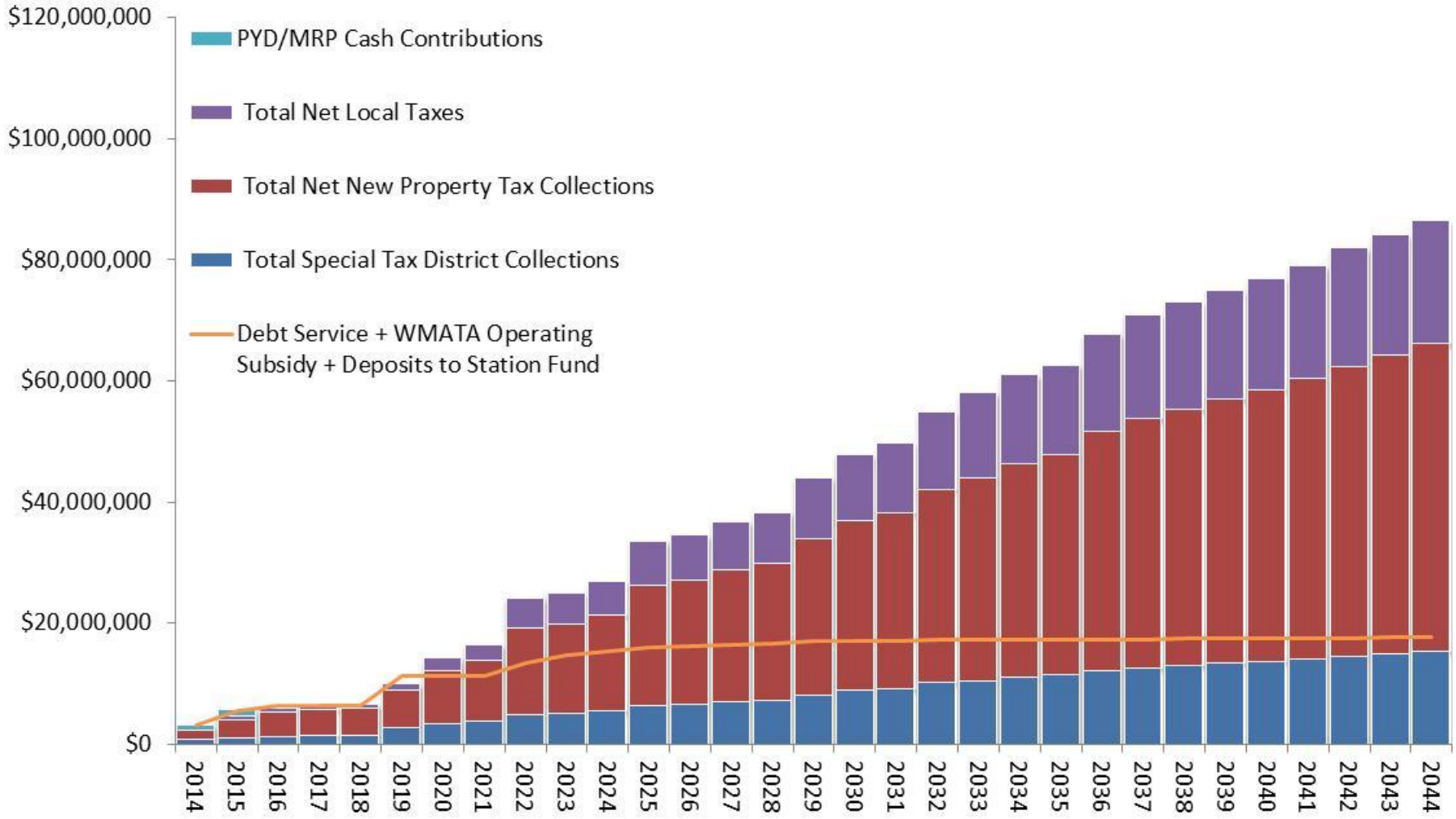
Key Findings

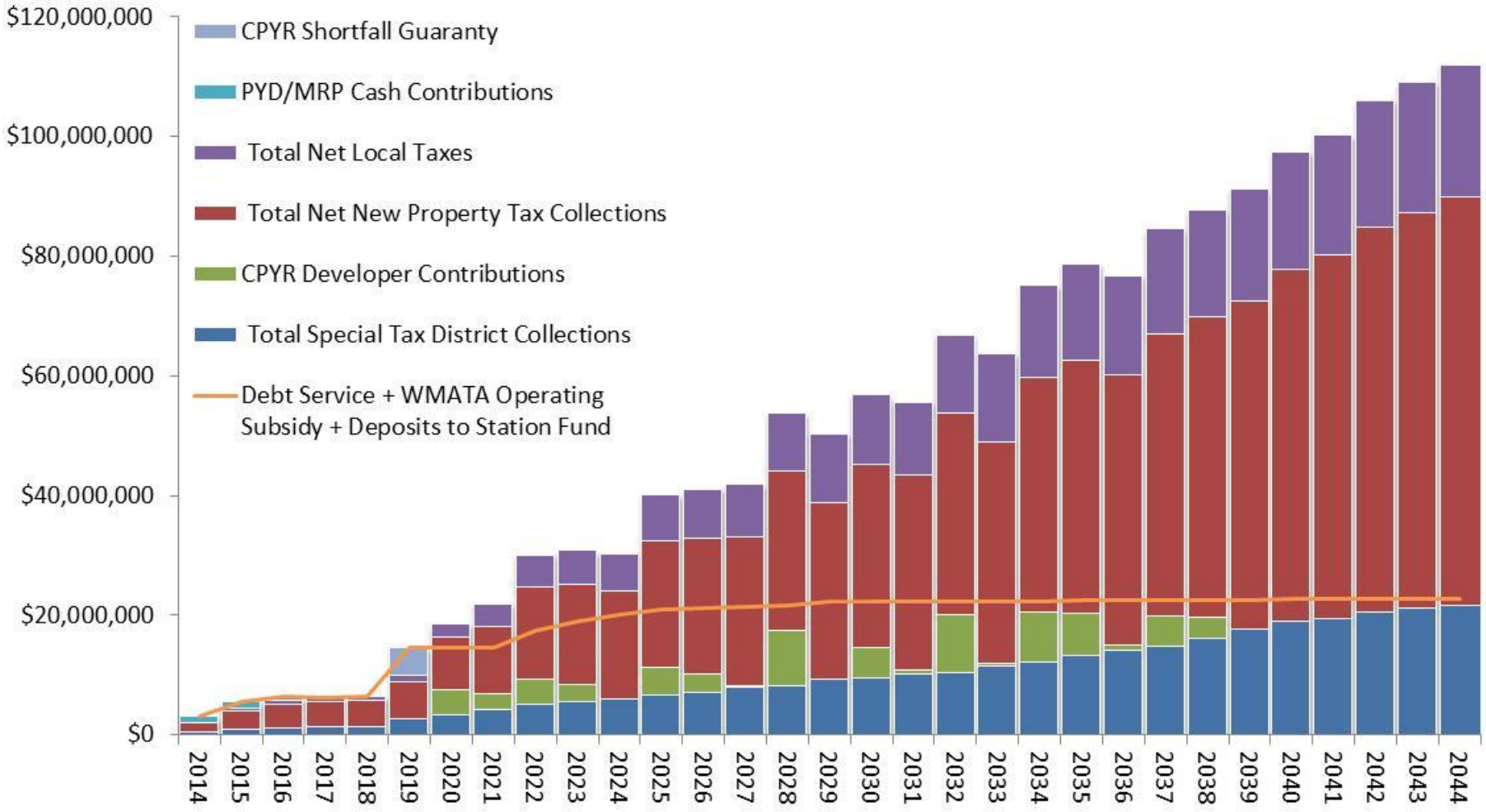
Alternative A has positive cash flow but $1.4 million additional funding will need to be identified

- Alternative A has positive cash flow overall but additional funding will need to be identified to cover a small, $1.4 million amount in 2019.
- Lower development buildout over the forecast period is offset by the lowest overall station construction cost of all scenarios; maximum annual debt service is $15.4 million.
- After 2019, debt service is covered by revenue from special taxes and property taxes.
- No developer (CPYR) contributions are available for Alternative A.



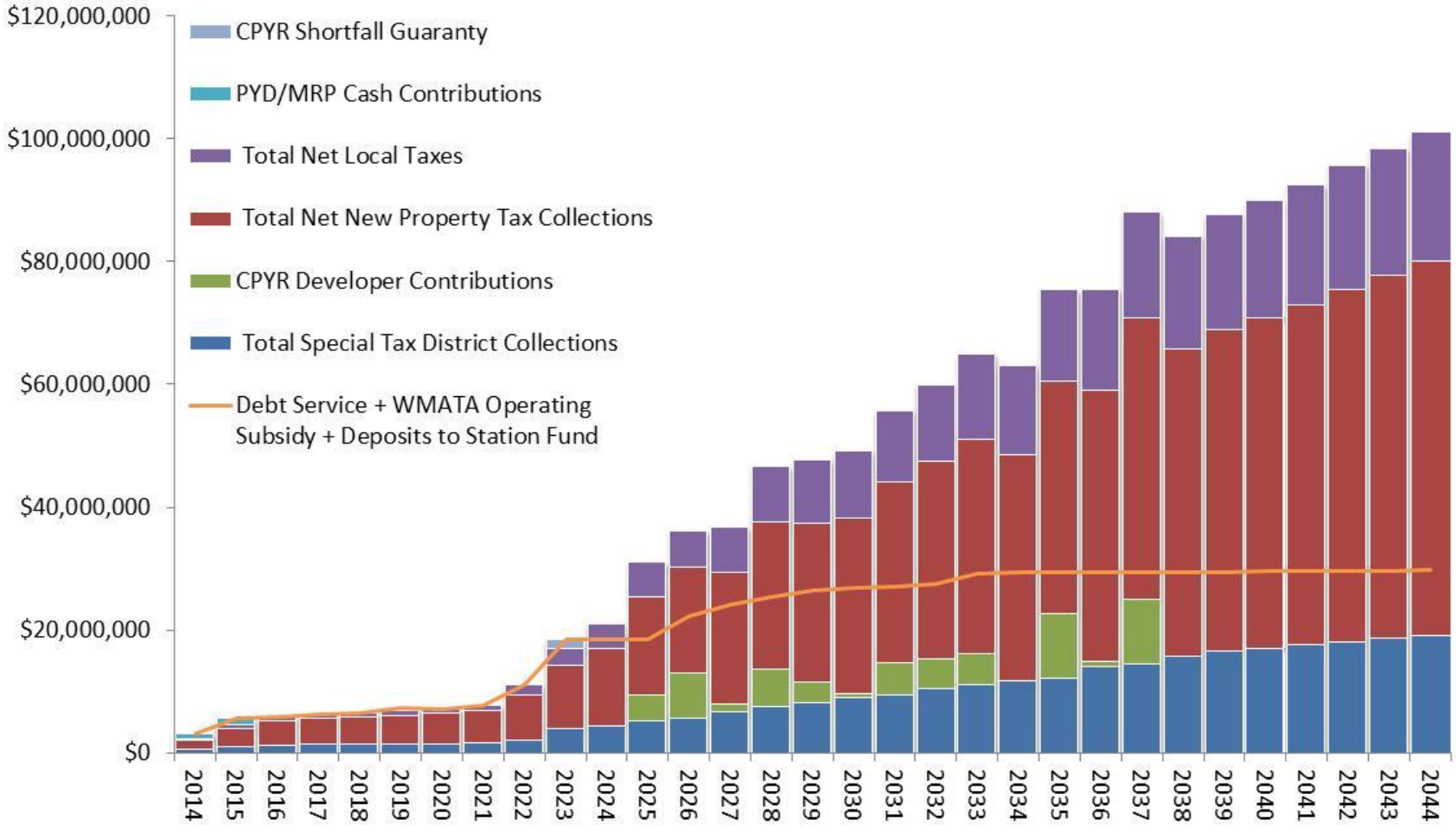
Alternative B has positive cash flow due over the entire forecast period

- Alternative B has positive cash flow due in part to the agreed upon developer contributions and use of $4.6 million developer provided shortfall guaranty.
- Developer contributions are collected from 2019 to 2037 and total $72 million.
- Alternative B also benefits from the combination of the second lowest station cost and the highest buildout forecast.
- Maximum annual debt service is equal to $20.5 million.



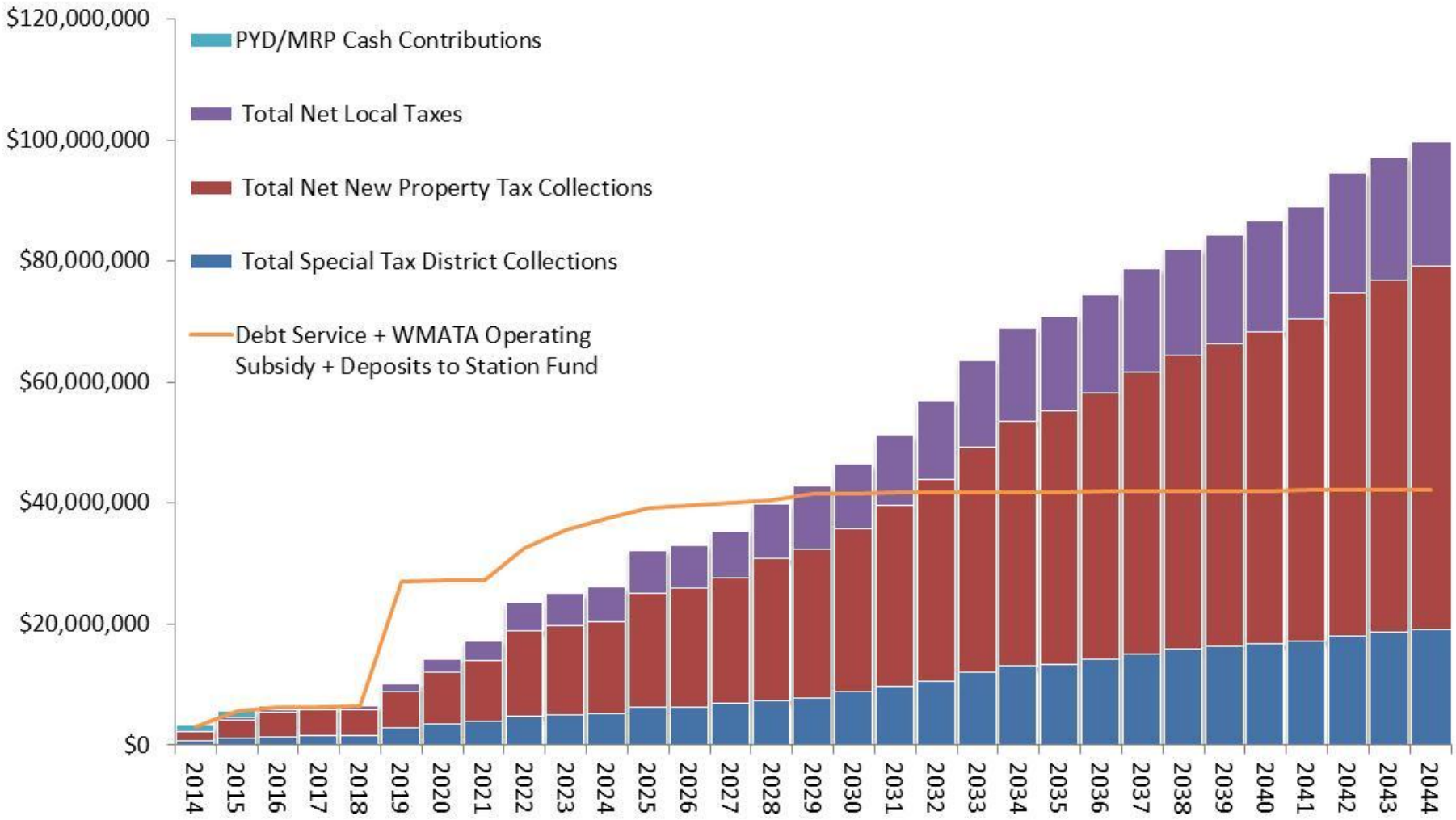
Design Option B-CSX has positive cash flow despite higher station costs due to construction timing lag

- Design Option B-CSX has positive cash flow due to a 3-year lag in the construction start, developer contributions, and the shortfall guaranty.
- Total developer contributions equal $61 million.
- Total buildout is similar to Alternative B but 1.3 million square feet of early development is lost.
- Station construction cost is significantly higher than Alternatives A & B; maximum annual debt service is $28 million.



Alternative D is not financially feasible

- Alternative D is not financially feasible, as shown by the sizable funding gap that begins in 2019 and ends in 2028.
- This funding gap is due primarily to the substantially higher station construction cost, which results in maximum annual debt service of $40 million.
- A funding gap of $91 million exists under this alternative.



Alternatives scorecard suggests Alternatives A & B have most positive attributes

- Alternative A has the lowest station cost and resulting debt service, but also results in the lowest amount of net new development, suggesting a lower risk / lower reward scenario.
- Alternative B has the second lowest station cost coupled with the most development buildout potential, and also benefits from substantial developer contributions.
- Design Option B-CSX has strong buildout potential but both the station and development buildout are delayed relative to other locations. Higher station costs also increase the financial risk of this scenario relative to Alternatives A and B.
- Alternative D is not financially feasible, due to having the highest station cost and second lowest buildout potential.

	Alternative A	Alternative B	Design Option B-CSX	Alternative D
Station Open Year	2019	2019	2023	2019
Station Cost	$209M	$268M	$351M	$493M
Bond Issuance	$208M	$278M	$357M	$542M
Level Debt Service	$15.4M	$20.5M	$27.4M	$40.0M
Additional Funding Needed	$1.4M	$0	$0	$91M
Developer Contributions	$0	$72M	$61M	$0
Net New Development (SF)	9.3M	13.0M	11.6M	11.5M
Residential Units	4,300	7,100	6,000	6,200
Jobs	20,000	26,400	23,400	22,200
Present Value of Cash Flows	$735M	$888M	$687M	$407M
Net Cash Flow PV : Station Cost Ratio	3.52	3.31	1.96	0.83

Costs and Financing Assumptions

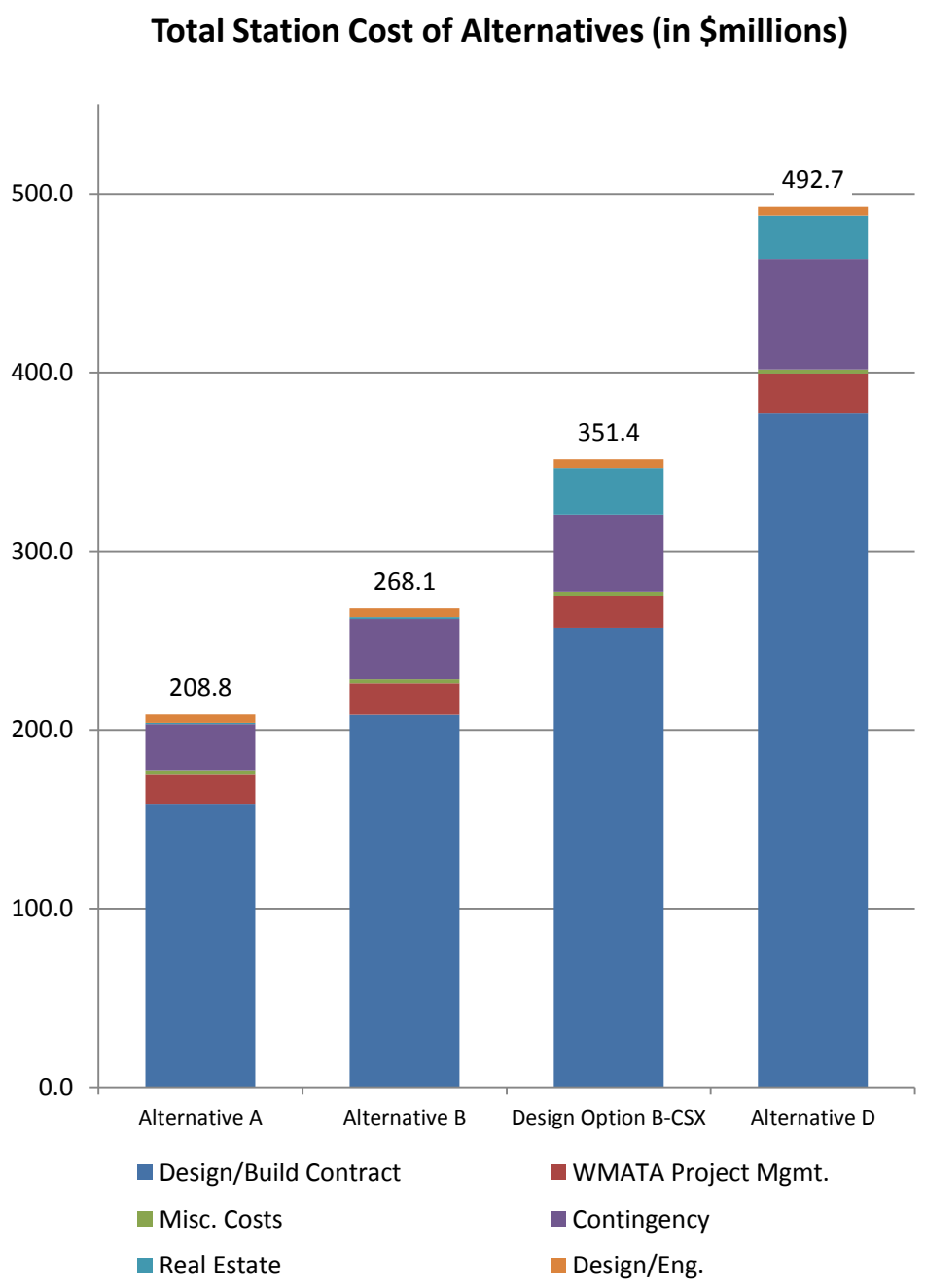
Breakdown of Station Costs by Alternative

- Project budget cost estimates provided by WMATA and based on preliminary engineering completed to date include a range from low to high for each alternative (chart reflects 85% of high end of cost estimate range).

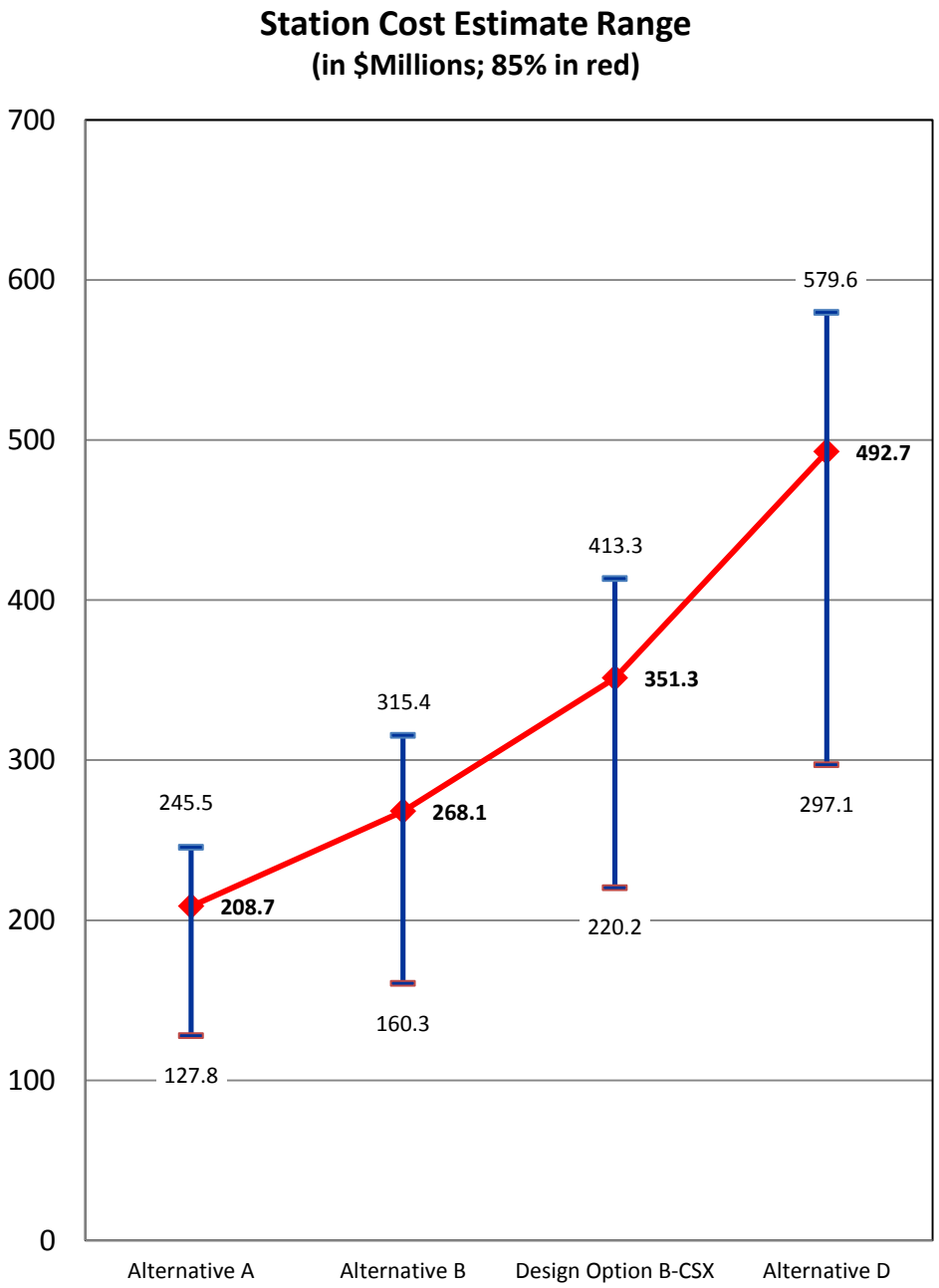
- Cost categories for each alternative include the following:
  - Design/build contract;
  - WMATA project management;
  - Miscellaneous cost categories;
  - Real estate costs;
  - Design & engineering;
  - Contingency:
    - Contract – 5% of award amount;
    - Project – 10% of project budget.

- Costs are escalated to the midpoint of construction and reflect revised construction timing when compared to 2010 study.

- The difference in the estimate range is primarily driven by major variations in the design, which drives the majority of the total cost, and additional real estate costs in Design Option B-CSX and Alternative D.



The Financial Feasibility Analysis assumes station costs at 85% of the high end of estimate range



Station cost assumptions

- Station Costs refer to the amount of hard and soft costs of all station planning, design, and construction expenses.
- The Net Station Costs are the Total Station Cost less certain prepaid costs such as Environmental Impact Statement costs. These costs were assumed to be funded directly from the City's Station Fund prior to the issuance date for the bonds.
- The Financial Feasibility Analysis assumes the Net Station Costs tested for feasibility is equal to 85% of the high end of the range of Net Station Costs for each alternative and design option.

Station cost conclusions

- The Alternative B cost of $268.1 million is somewhat higher than the assumption of the 2010 financial plan. In 2010, the station cost assumed in Scenario B3 was $241 million.
- The station cost for Alternative A is $208.7 million. This is $59 million, or 23%, less than Alternative B.
- Design Option B-CSX is significantly higher than Alternatives A and B partly due to increased property acquisition costs and construction inflation due to a later start date.
- Alternative D is significantly higher than the other alternatives due to costs associated with additional guideway and track elements, as well as increased property acquisition costs.

Financing cost assumptions are conservative and similar to 2010 analysis

- The following financing terms are assumed for the station construction funding:
  - The City will fund station construction costs by issuing general obligation bonds;
  - Because the development buildout period results in low levels of revenue in early years, the bond issuance is structured to minimize debt service in early years through the following:
    - Construction period interest is capitalized during the first three (3) years after bond issuance;
    - During years four through six (4 through 6), repayment will be interest only;
    - Principal repayment will begin in year seven (7).
  - A 10-year call provision will be included, so it is possible that some of the debt could be repaid earlier from project revenue.

- Assumptions used in the financial model to calculate the debt service include the following:
  - Use of AAA/Aaa rated general obligation bonds issued by the City;
  - An interest rate of 4.74%;
    - This rate is based on the 20-year average for AAA municipal bonds;
    - Current 20-year AAA bond rates are 3.12% which are historically low. As such, this study's assumption represents a more normal interest rate of over 50% of current rates;
    - This assumption is slightly more conservative than the 2010 assumption of 4.4%.
  - Issuance cost of 1%;
  - Interest earnings on bond proceeds of 0.2%;
  - 30-year bond maturity with issuance in 2015 (2018 for Alternative B-CSX);
  - Gradual ramp-up of principal repayment in years 7-17, and then level principal and interest through year 30.

Revenue Assumptions

Potomac Yard Metrorail Station Fund and Shortfall guarantee

- The City has established the Potomac Yard Metrorail Station Fund. Proceeds from the Station Fund are to be used solely for the design, construction, and financing of the station and will be segregated from other City revenues.

- The City is able to use proceeds from the Station Fund for the following uses:
  - Debt service on bonds issued to finance the station;
  - Offsetting of any annual operating expense deficits specifically allocable to the station and chargeable to the City;
  - Expenses incurred in the establishment of the fund;
  - Station design costs including architectural, engineering, design, and construction document costs; costs of land acquisition, costs of permit or grant applications, environmental studies, legal and other professional service costs;
  - Ongoing costs of construction or debt service from any construction loan;
  - Cost of building a standalone pedestrian bridge if a station is not constructed.

- The Station Fund will accumulate revenue from the following agreed upon sources and mechanisms detailed below and described in more detail in later sections of this report:
  - Net new tax revenue;
  - Special tax districts;
  - Developer contributions;
  - Any federal, state, or regional grant funds.

- Shortfall guarantee – in order to reduce the risk that the City may need to draw upon General Fund revenue, CPYR, the owner of Landbay F, agreed to cover any shortfall for Alternative B or Alternative B-CSX should the Station Fund level be insufficient to cover annual debt service. This guarantee is capped at a cumulative amount of $32 million of the life of the bond issuance, and cannot exceed $10 million in any single calendar year.

- The terms of the CPYR MOU were developed based on a station location similar to the current Alternative B. This analysis assumes the developer contribution and shortfall guarantee apply to Alternative B-CSX but not to Alternatives A and D. CPYR is not obligated to make any contributions for Alternatives A or D.

Revenue Sources – Net New Taxes

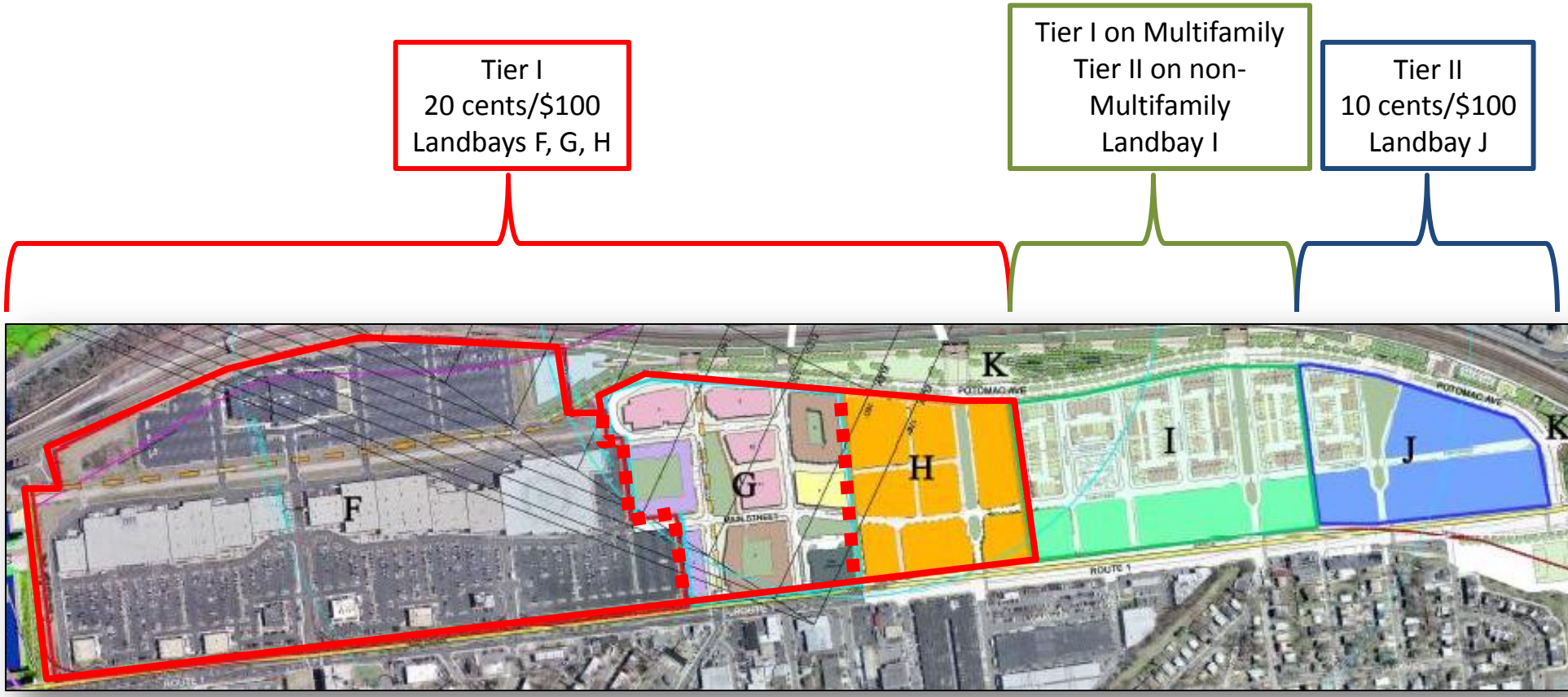
- Predevelopment tax revenues generated at Potomac Yard (for all landbays) will continue to go to the General Fund and are not counted as available for Metrorail station financing.
- For new tax revenues generated by new development at Potomac Yard (in all landbays), a fixed percentage (60% of residential, 13% of retail, 17% of office, and 6% of hotel taxes) would go to the General Fund to pay for City and school services that the new residents and businesses in Potomac Yard may generate. These percentages are based on a fiscal impact conducted for the City, and represent the amount necessary to cover the cost of the City's services for the new development.

Revenue Source	Assumptions
Real Property	• Assumes $1.043/$100 valuation based on current real property tax rate. • Future new construction property values based on the following: •Achievable pricing at actively selling new construction residential units in Potomac Yard; •Existing values of the Carlyle area, a relatively new, mid- to high-density, mixed-use development.
Sales	• 1% tax on all retail sales • Assumes annual retail sales of $500/square foot of net new retail development forecast to be built out over the 30-year period.
Transient Lodging	• 6.5% local tax on gross hospitality revenue. • $1.00 per occupied room per night. • Forecast assumes new hospitality will achieve average daily rate (ADR) of $126 and average annual occupancy of 70%, based on historical data for the Alexandria hotel market.
Meals	• 4% local tax on restaurant sales. • Assumes 10% of net new retail space will be occupied by restaurant tenants.
Business License (BPOL) Business Tangible (BPP)	• Estimates of BPOL and BPP revenue are based on revenue per employee calculated using total revenue from the 2012 City budget and total at-place employment. • Future employment forecast based on total square feet of commercial development and square feet/employee assumptions for office, retail, and hospitality. These figures were adjusted downward for federal and non-profit employment, exempt from local BPOL and BPP taxes.

Revenue Sources – Special Tax Districts

- Two different special tax districts have been established to generate further revenue for the Station Fund. All taxable real property in both districts are to be taxed with no exemptions. Landbay L is the only area not included in a special district.

Tier I	• Special tax of 20 cents per $100 of valuation applied to Landbays F, G, H, and the multifamily portion of I. • Collections began in 2011.
Tier II	• Special tax of 10 cents per $100 of valuation applied to the non-multifamily development in Landbay I and all of Landbay J. • Collections will commence the first calendar year after the station opening.



Revenue Sources – Developer Contributions

- The third primary source of revenue is from developer contributions made by the various owners of the different landbays. These are outlined in the CPYR MOU.

CPYR – Landbay F	• The owner of Landbay F has previously pledged to contribute $10 per square foot (2010 dollars) of new development for up to 4.9 million square feet of development, indexed to inflation, in the Alternative B and B-CSX scenario. • The North Potomac Yard developer contributions are not applicable to the Alternative A financial analysis, as the developer is not obligated to provide contributions for Alternative A. • The North Potomac Yard developer contributions are not applicable to the Alternative D financial analysis at this time, as the developer has indicated that they may only provide a "meaningfully less" contribution for Alternative D due to the loss of significant development potential and negative impact (visual, noise, etc.) on the redevelopment value of North Potomac Yard. The amount of that contribution would need to be negotiated.
MRP & PYD – Landbays G, H, I, & J	• MRP and PYD, the developers of Landbays G, H, I, & J, in addition to previous contributions to infrastructure needs, agreed to a $2 million cash contribution. • This payment is in lieu of construction of a standalone pedestrian bridge. • According to the MOU, this contribution will be made in four separate payments of $500,000 based on a set schedule.

Development Assumptions

Development Overview based on Station Location Alternatives

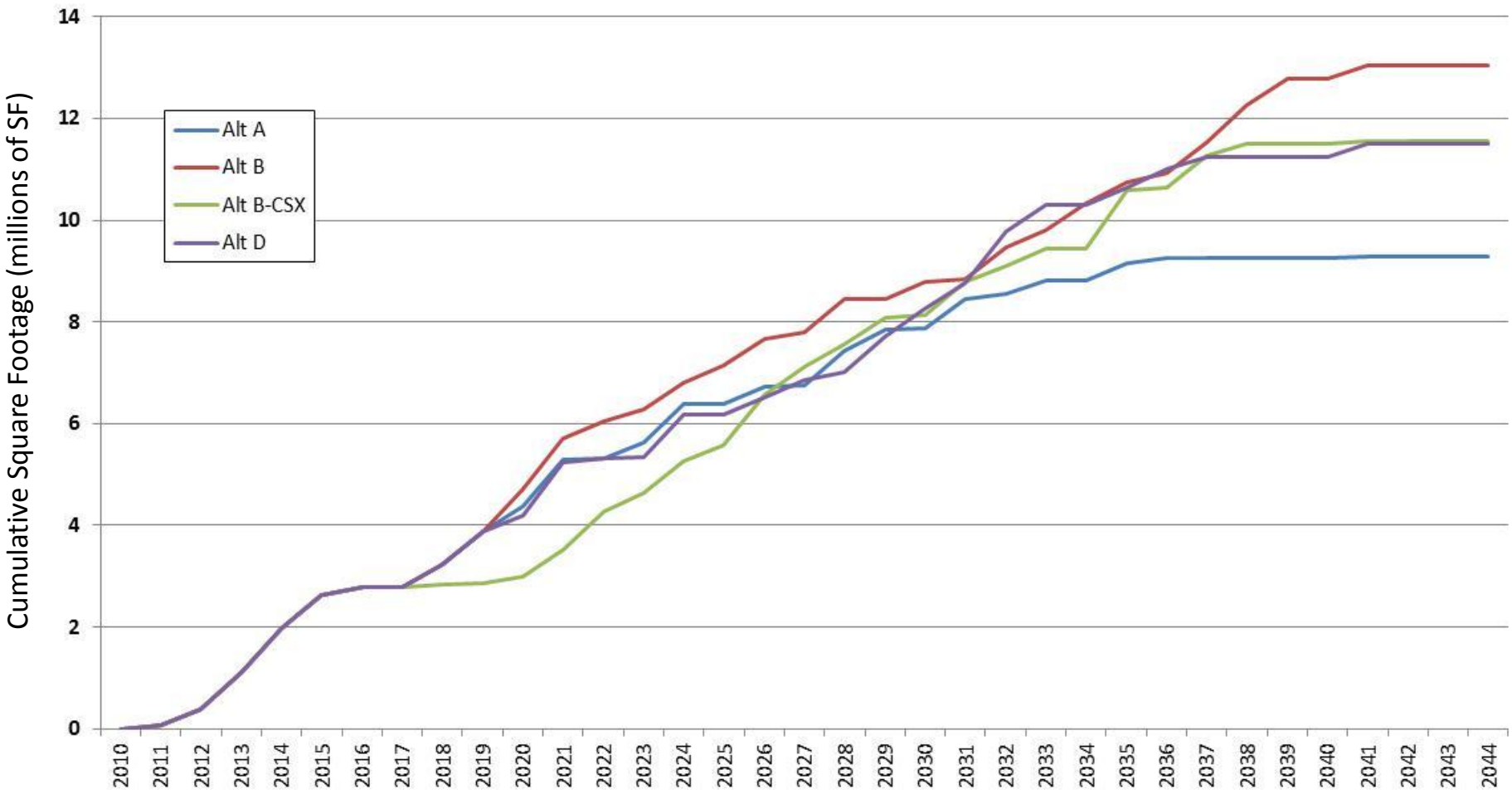
- The development buildout forecast assumes the same amount and mix of development will take place in landbays G, H, I, J, and L across all alternatives.
- As such, development on Landbay F is the only factor that varies by alternative.

Alternative A	Alternative B	Design Option B-CSX	Alternative D
Based on conversations between the City and CPYR (the owner of Landbay F), this analysis assumes, based on existing zoning, the lowest amount of development on Landbay F (3.75 million square feet) and no developer contribution in Alternative A.	Under the Alternative B scenario, the maximum development potential (7.3 million square feet) based on existing zoning is assumed for Landbay F. As such, Alternative B results in the highest total buildout for all land uses.	In Design Option B-CSX, the existing rail line is relocated slightly to the west. This change straightens the existing alignment, which results in less impact on surrounding wetlands but does reduce total developable area in Landbay F by 1.3 million square feet to 6.0 million square feet.	Under Alternative D, a significant amount of development is forecast to take place. However, this scenario reduces the overall development envelope by 1.3 million square feet due to major ROW requirements in Landbay F from the track and station location.

Development Assumptions – Total Development by Land Use, Alternative, and Landbay

- Estimates for total development by land use, landbay, and alternative were provided by the City and are shown below.

	Alternative A	Alternative B	Design Option B-CSX	Alternative D
Residential (units)	F: 2,043 G: 730 H: 302 I: 416 J: 374 L: 441 Total: 4,300	F: 4,835 G: 730 H: 302 I: 416 J: 374 L: 441 Total: 7,100	F: 3,700 G: 730 H: 302 I: 416 J: 374 L: 441 Total: 6,000	F: 3,943 G: 730 H: 302 I: 416 J: 374 L: 441 Total: 6,200
Office (SF)	F: 981K G: 1.0M H: 1.2M Total: 3.2M	F: 2M G: 1.0M H: 1.2M Total: 4.2M	F: 1.5M G: 1.0M H: 1.2M Total: 3.7M	F: 1.3M G: 1.0M H: 1.2M Total: 3.5M
Retail (SF)	F: 642K G: 116K H: 26K J: 5K L: 5K Total: 795K	F: 615K G: 116K H: 26K J: 5K L: 5K Total: 768K	F: 615K G: 116K H: 26K J: 5K L: 5K Total: 768K	F: 615K G: 116K H: 26K J: 5K L: 5K Total: 768K
Hotel (rooms)	F: 400 G: 340 Total: 740	F: 400 G: 340 Total: 740	F: 400 G: 340 Total: 740	F: 400 G: 340 Total: 740
Total Square Feet Developed	**9,286,000**	**13,050,000**	**11,552,000**	**11,498,000**

Total development in square feet is maximized in Alternative B

- Alternative B results in the highest amount of square footage of new real estate developed over the forecast period.
- Design Option B-CSX has the second highest development buildout forecast but is delayed by three years due to later station construction start.
- Alternative D results in a lower total buildout forecast relative to Alternative B and B-CSX due to the 1.3 million square feet of development potential consumed by the track realignment into Landbay F.
- Alternative A reflects less development potential on Landbay F based on current zoning.