

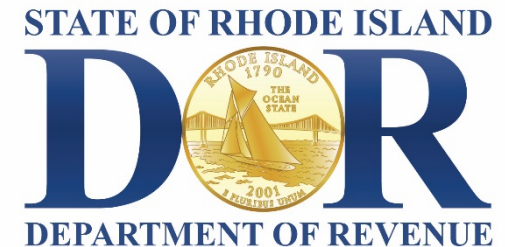
Assessing the Analysis of the Economic Impact of a New Downtown Pawtucket Ballpark

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Caveat to the Presentation

- The views, if any, expressed in the presentation or the accompanying commentary, including responses to questions, are those of the Office of Revenue Analysis in general and the Chief of Revenue Analysis in particular.
- As such, these views are not necessarily those of the Department of Revenue, the Governor's Office or the Rhode Island Commerce Corporation.
- The Office of Revenue Analysis made no attempt to ascertain whether the fiscal benefits from the proposal are sufficient to support the proposal's financing costs.
- The presentation does not capture potential intangible factors that may be influential to any decision that is made regarding the proposal.

What To Expect From This Presentation

- An analysis of the economic impact of the construction phase of the proposed new ballpark and the ancillary development with a comparison between:
 - RIMS-II model output and REMI PI+ model output.
 - B&D fiscal benefits estimates and ORA fiscal benefits estimates.
- An assessment of the fiscal impact of the continuing operations of the Pawtucket Red Sox organization in the new ballpark.
 - Drill down on the estimates provided by Brailsford and Dunlavey (B&D).
- An assessment of the fiscal impact of the ancillary development post-construction.
 - Drill down on the estimates provided by Brailsford and Dunlavey (B&D).

What Not To Expect From This Presentation

- An unequivocal answer as to whether the state should go forward with a public-private partnership in the construction of a new ballpark for the Pawtucket Red Sox.
- Pinpoint accuracy in any one set of economic and/or fiscal outcomes.
 - All figures are estimates and should be treated as such.
- Exact alignment between the economic impact results generated by the RIMS-II model versus the REMI PI+ model.
- Analysis by ORA of the economic impact from the PawSox organization's continuing operations at a new ballpark or from the commercial/residential activity at the ancillary development.

Presentation Takeaways

- The REMI model generates greater economic impacts from the construction phases of the new ballpark and the ancillary development.
 - In spite of this, ORA's revenue estimates from the construction of both the new ballpark and the ancillary development are less than B&D's estimates.
- B&D estimates of the fiscal benefits from the operation of the new ballpark are significant and may not be plausible absent additional detailed information from the PawSox organization.
- B&D estimates of the fiscal benefits from the operation of the ancillary development are more plausible although the sales tax estimates appear to be at the high end of plausible.

Outline of the Presentation

- Brief Overview of the Economic Impact Models
 - RIMS-II
 - REMI
- Economic Impact and Fiscal Benefits of the Construction of a New Ballpark
 - Summary of the B&D results
 - Presentation of the REMI PI+ results and ORA calculated fiscal benefits
- Detailed Analysis of the B&D Annual Fiscal Benefits from the New Ballpark
- Economic Impact and Fiscal Benefits of the Ancillary Development Buildout
- Detailed Analysis of the B&D Annual Fiscal Benefits from the Buildout

INTRODUCTION

Items to Note About the Project

- One of the challenges of determining the indirect impact of the new ballpark is that the operation of the new ballpark is not new economic activity in the market.
 - It is the transfer of an existing operation from one location in the market to another location in the same market.
- As B&D notes, the “[T]icket sales and in-stadium spending are not considered direct economic impacts” from the project as “much of this spending is displacement or ‘substitution’ spending” that would occur even without a ballpark in the market.
- No market analysis was done to determine the demand for the identified real estate uses in the ancillary development.
 - A majority of the spending and jobs are assumed to be net new to the state.

OVERVIEW OF THE ECONOMIC IMPACT MODELS

B&D: The Economic Impact Model

- Brailsford and Dunlavey, Inc. (B&D) used the U.S. Bureau of Economic Analysis' Regional Input-Output Modeling System (RIMS-II) to conduct “a benefits analysis of a proposed new ballpark and surrounding ancillary development” in downtown Pawtucket.
- The RIMS-II model is essentially a set of multipliers.
 - Static model that does not account for price elasticities, changes in household or firm behavior in response to the direct effect impacts, etc.
 - Single region model that ignores any feedback that may exist among regions.
- Due to these limitations, B&D made adjustments to the “operating expenditures and cost components” used in the analysis prior to applying the RIMS-II multipliers to these inputs.

ORA: The Economic Impact Model

- ORA used the REMI PI+ model of the state's economy to analyze the economic impact of the new PawSox stadium and the ancillary development.
- The REMI PI+ model “is a structural economic forecasting and policy analysis model” that “integrates input-output, computable general equilibrium, econometric, and economic geography methodologies.”
- The REMI PI+ model “is dynamic, with forecasts and simulations generated on an annual basis and behavioral responses to compensation, price, and other economic factors.”
- The REMI PI+ model is a multi-year model that estimates the total impact of the project including leakages out of and into the economy.

ECONOMIC IMPACTS: BALLPARK CONSTRUCTION

B&D Assumptions: Ballpark Construction

- B&D accounted for leakages of the indirect impacts outside of the region by discounting the direct impacts as follows: wages, 40% retained in market; materials purchases: 20% made in market; and soft costs, 15% from in market.
 - Percentages were based on the McCoy Stadium Study B&D completed in January 2017.
- Benefits from the project are measured in terms of economic activity: jobs, income, and state and local revenues.
- The benefits figures cited by B&D are total benefits from the new ballpark, the operation of the PawSox at the new ballpark, and the ancillary development and include the benefits currently realized in the market from the current operation of the PawSox at McCoy Stadium.

B&D Assumptions: Ballpark Construction

- B&D analyzed ballpark construction costs broken down as follows:

	Dollars	Percent
Hard Costs	\$53.2 million	70% of Total Costs
Materials	\$31.9 million	60% of Hard Costs
Construction Wages	\$21.3 million	40% of Hard Costs
Soft Costs	\$22.8 million	30% of Total Costs
Total Costs	\$76.0 million	100 % of Total Costs

- Direct wages are assumed to be 40% of the \$21.3 million in construction wages, or \$8.5 million.
- Direct economic activity is calculated as 20% of the materials costs, or \$6.38 million, plus 15% of the soft costs, or \$3.42 million, for a total of \$9.8 million.

B&D Analysis: Construction Economic Benefits

- B&D estimates direct and indirect benefits as follows:

	Economic Activity	Wages	Jobs
Direct Benefits	\$9.8 million	\$8.5 million	164
Indirect Benefits	\$7.7 million	\$13.6 million	274
Total Benefits	\$17.5 million	\$22.1 million	438

- B&D used an average wage of \$51,800 to infer 164 direct jobs from the construction of the new ballpark.
- Indirect wages are generated by applying the RIMS-II direct-effect earnings multiplier for the non-residential structures sector to the direct wages.
 - B&D used an average wage of \$49,600 to infer 274 indirect jobs.

B&D Analysis: Construction Fiscal Benefits

- B&D estimates direct fiscal benefits from the construction phase from wages paid, construction management costs, and construction materials purchased.

State Revenue Source	Amount
Personal Income Tax	\$798,000
Business Corporation Tax	\$60,000
Sales and Use Tax	\$2,234,000
Total State Tax Revenue	\$3,092,000

- Based on total estimated wages of \$22.1 million, ORA calculated an effective personal income tax rate of 3.61 percent, while B&D uses an 80 percent business corporation apportionment factor, and a 7.0 percent sales and use tax rate on all construction materials.

ORA Analysis: Construction Fiscal Benefits

- Based on ORA's TY 2014 personal income tax file, the effective tax rate for all Rhode Island income tax filers was 3.17 percent.
 - Using this effective tax rate implies total personal income tax collections of \$700,570 rather than the \$798,000 B&D estimates.
- If the construction management company apportions less than 80 percent of its net income to RI then the business corporation tax revenue will not be \$60,000.
 - If the company has a 50 percent net income apportionment to Rhode Island would pay \$37,000 in business corporation tax.
- B&D's sales and use tax estimate of \$2,234,000 is the maximum amount that could be realized since sales tax paid to other states is included in this figure. This assumes no project based sales tax exemption is granted.

REMI Analysis: Construction Economic Benefits

- ORA used the REMI PI+ model of the state's economy to analyze the economic impact of the construction of a new Pawtucket Red Sox ballpark.
- This analysis utilized the full cost of the stadium construction and spread these costs over two years (verified by the PawSox) with 2/3 of the soft costs and 1/3 of the hard costs expended in CY 2018 and vice-versa in CY 2019:

REMI Model Sector	CY 2018	CY 2019	Two Year Total
Construction	\$17,733,333	\$35,466,467	\$53,200,000
Professional, Scientific, and Technical Services	\$15,200,000	\$7,600,000	\$22,800,000
Total	\$32,933,333	\$43,066,067	\$76,000,000

REMI Analysis: CY 2018 Economic Benefits

Model Output	Construction Sector	Professional, Scientific, and Technical Services	Other Industries (17 in total)	Total
Net GDP	\$10,818,763	\$6,830,906	\$9,419,425	\$27,069,094
Total Private Employment	154	78	91	323
Direct Effect	132	67	0	199
Indirect Effect	1	9	35	45
Induced Effect	0	1	55	56
Investment Activity Demand	21	1	1	23
Government Employment	--	--	--	9
Total Wages	\$5,923,297	\$3,748,490	\$4,072,942	\$13,744,729

- Other Industries employment includes: retail trade, 23; health care and social assistance, 14; accommodation and food services, 10; and other services, 9.

REMI Analysis: CY 2019 Economic Benefits

Model Output	Construction Sector	Professional, Scientific, and Technical Services	Other Industries (17 in total)	Total
Net GDP	\$21,444,674	\$4,141,690	\$13,840,600	\$39,426,964
Total Private Employment	293	45	131	469
Direct Effect	255	32	0	287
Indirect Effect	1	10	51	62
Induced Effect	0	1	80	81
Investment Activity Demand	38	2	2	42
Government Employment	--	--	--	17
Total Wages	\$11,774,646	\$2,381,046	\$6,455,440	\$20,611,132

- Other Industries employment includes: retail trade, 37; health care and social assistance, 20; accommodation and food services, 14; and other services, 13.

ORA Fiscal Benefits Based On REMI Output

Revenue Source	% of 2018 GDP	2018 Revenue Estimate	% of 2019 GDP	2019 Revenue Estimate
Personal Income Tax (PIT)	2.07%	\$ 559,490	2.06%	\$ 557,768
Business Corporation Tax (BCT)	0.23%	61,829	0.22%	60,518
Sales and Use Tax (SUT)	1.73%	468,157	1.71%	463,282
Sub-Total PIT, BCT, SUT	4.03%	\$1,089,476	3.99%	\$1,081,568
Total Taxes (including PIT, BCT, SUT)	4.82%	1,304,922	4.76%	1,288,556
Total Taxes and Departmental Receipts	5.44%	1,473,880	5.36%	1,451,193
Total General Revenues	6.07%	1,642,458	5.94%	1,608,293

ECONOMIC IMPACTS: BALLPARK OPERATIONS

B&D Assumptions: Ballpark Operations

- “B&D relied on its professional expertise and current and historical data provided by the Team to model the operations of the Pawtucket Red Sox in a new ballpark.”
- The model’s assumptions are:
 - Paid attendance of $\approx 597,000$ in 2020, the first year in the new ballpark
 - Actual attendance of 400,000 in 2020
 - Paid attendance of $\approx 569,000$ in 2024, stabilized year
 - Actual attendance of 381,000 in 2024
 - A total of 70 scheduled games, 68 openings (2 rain-outs)
 - 44% of game attendees are from RI (or 176,000 in 2020), 50% are from out-of-state (or 200,000 in 2020), and 6% “would likely stay overnight” after attending a game (or 24,000 in 2020).

ORA Assessment: Ballpark Operations

- ORA used the data provided by B&D in their study to determine the following:

Year of Operation	Paid Attendance Per Game *	Actual Attendance Per Game *	Number of Rhode Islanders †	Number of Out-of-Staters †	Number of Likely Overnights †
2020	8,779	5,882	2,588	2,941	353
2024	8,368	5,603	2,465	2,802	336
* Based on 68 openings per season					
† Based on Actual Attendance Per Game					

- Per game paid attendance declines by 4.68% between 2020 and 2024
 - Per game actual attendance declines by 4.76% between 2020 and 2024
- B&D assumes a total of \approx 128,000 non-tenant event attendees (concerts, sporting events, meetings, etc.)

B&D Assumptions: Ballpark Operations

- Non-tenant event attendance is assumed to be 85% from Rhode Island, 10% from out-of-state, and 5% that would likely stay overnight
 - Total Rhode Islanders: 108,800
 - Total Out-of-Staters: 12,800
 - Likely Overnights: 6,400

Type of Non-Tenant Events	Number of Non-Tenant Events	Attendance Per Non-Tenant Event	Number of Rhode Islanders	Number of Out-of-Staters	Number of Likely Overnights
Non-Ticketed	127	125	106	13	6
Ticketed	54	2,076	1,765	208	104

ORA calculations based on information provided by the PawSox organization on October 2, 2017.

B&D Analysis: Operations Economic Benefits

- B&D estimates direct and indirect benefits as follows:

	Economic Activity	Wages	Jobs
Direct Benefits	\$12.7 million	\$5.9 million	162
Indirect Benefits	\$10.0 million	\$12.7 million	319
Total Benefits	\$22.7 million	\$18.6 million	481

- It appears that B&D deduces the number of jobs by dividing wages by an average wage.
 - Estimated average wage for direct benefits jobs is \$36,420.
 - Estimated average wage for indirect benefits jobs is \$39,812.
- ORA was unable to model the economic benefits of the continuing operations of the PawSox without detailed data on the spending patterns of the team.

B&D Analysis: Operations Fiscal Benefits

- B&D estimates direct fiscal benefits as follows:

Revenue Source	Rate	2020	2021	2022	2023	2024
Personal Income Tax	3.75% - 5.99%	\$1,498,000	\$1,541,000	\$1,587,000	\$1,633,000	\$1,681,000
In-Ballpark Sales Tax	7.0%	576,000	571,000	576,000	578,000	578,000
Visitor Sales Tax	7.0%	792,000	808,000	824,000	841,000	858,000
State Hotel Tax	5.0%	114,000	117,000	119,000	121,000	124,000
Tangible Property Tax	0.05209%	154,000	151,000	141,000	122,000	110,000
Local Meal and Beverage Tax	1.0%	93,000	93,000	96,000	98,000	100,000
Local Hotel Tax	1.0%	14,800	14,800	15,800	16,800	17,900
City of Pawtucket		\$261,800	\$258,800	\$252,800	\$236,800	\$227,900
State of Rhode Island		\$2,980,000	\$3,037,000	\$3,106,000	\$3,173,000	\$3,241,000
<i>Annual Total</i>		\$3,241,800	\$3,295,800	\$3,358,800	\$3,409,800	\$3,468,900

ORA Assessment: Fiscal Impact of Operations

- Based on B&D's estimates, the total sales tax generated from the operations of the new ballpark are \$1,368,000 in 2020, increasing to \$1,436,000 in 2024.

Year of Operation	In-Ballpark Sales Tax (A)	Visitor Sales Tax (B)	Total Sales Tax (C) = (A) + (B)
2020	\$576,000	\$792,000	\$1,368,000
2024	\$578,000	\$858,000	\$1,436,000

- ORA then decomposed the total sales tax into three components:
 State sales tax on meal and beverage = $(\$93,000 \div 1.0\%) \times 7.0\% = \$651,000$
 State sales tax on lodging = $(\$114,000 \div 5.0\%) \times 7.0\% = \$159,600$
 State sales tax on all other items = $\$1,368,000 - \$651,000 - \$159,600$

ORA Assessment: Fiscal Impact of Operations

- Or in a tabular display:

Year of Operation	Total Sales Tax (C)	Meal and Beverage Sales Tax (D)	Lodging Sales Tax (E)	All Other Sales Tax (C) – (D) – (E)
2020	\$1,368,000	\$651,000	\$159,600	\$557,400
2024	\$1,436,000	\$700,000	\$173,600	\$562,400

- In 2020, total spending on meal and beverage is estimated to be \$17.61 per attendee (based on 528,000 attendees), increasing to \$19.65 per attendee in 2024 (based on 509,000 attendees).
- For all other sales tax, total spending in 2020 is estimated to be \$15.08 per attendee, rising to \$15.81 per attendee in 2024.

ORA Assessment: Fiscal Impact of Operations

- Thus, total spending on taxable meal and beverage and taxable all other sales is estimated to be \$32.69 per attendee in 2020 and \$35.46 per attendee in 2024.
 - For a family of four, this amounts to \$130.76 in 2020 and \$141.84 in 2024.
 - Figures do not include tickets, parking, or personal transportation costs.
- Total spending on taxable lodging is \$2,280,000 in 2020 or \$75.00 per likely overnighiter (based on 30,400 overnighiters), rising to \$2,480,000 in 2024 or \$84.76 per likely overnighiter (based on 29,260 overnighiters).
 - For a family of four staying in two rooms, this works out to \$300.00 in 2020 and \$339.04 in 2024.
- Thus a family of four that stays overnight will incur total costs of \$430.76 in 2020 and \$480.88 in 2024.

ORA Assessment: Fiscal Impact of Operations

- B&D estimates \$1,498,000 in state income taxes from direct baseball and non-baseball jobs in 2020, increasing to \$1,681,000 in 2024.

Year of Operation	Total Income Tax	Number of Direct Jobs	Income Tax per Direct Job	Average RI AGI to Generate Income Tax *
2020	\$1,498,000	162	\$9,247	\$200,482
2024	\$1,681,000	162	\$10,376	\$214,450

* Assumes single filing status with no modifications to federal AGI and no use of tax credits

- ORA also analyzed the state income taxes paid using both direct baseball and non-baseball jobs and all indirect jobs.

Year of Operation	Total Income Tax	Number of Direct and Indirect Jobs	Income Tax per Direct Job	Average RI AGI to Generate Income Tax *
2020	\$1,498,000	481	\$3,114	\$78,368
2024	\$1,681,000	481	\$3,495	\$86,389

ORA Assessment: Fiscal Impact of Operations

- Observations on the revenue estimates derived by B&D for 2020:
 - B&D includes \$576,000 of in-ballpark sales tax revenues as a state fiscal benefit.
 - *The state would still receive some of this sales tax revenue even without a new ballpark as in-ballpark spending is re-allocated in the economy.*
 - B&D includes \$114,000 of transient occupancy tax revenues as a state fiscal benefit.
 - The state general fund does not receive any state hotel tax revenues although CommerceRI does receive a portion of these revenues.
 - B&D includes \$14,800 of transient occupancy tax revenues as a local fiscal benefit.
 - Local governments receive 25% of the state hotel tax or \$28,500.
 - The local 1.0 percent hotel tax should be \$22,800.

ECONOMIC IMPACTS: ANCILLARY DEVELOPMENT CONSTRUCTION

B&D Assumptions: Ancillary Construction Phase

- B&D considered two ancillary development proposals:

Project	Project Budget (2020 Dollars)	Division Street Parcel (2020 Dollars)	Total Budget (2020 Dollars)
Apex	\$110.3 million	\$37.3 million	\$147.6 million
Tidewater	\$14.1 million	\$37.3 million	\$51.4 million

- The Division Street Parcel is required to accommodate parking for the new ballpark.
- The Apex and Tidewater project costs do not include land acquisition, structured or surface parking, or infrastructure improvements.

B&D Assumptions: Apex Construction Phase

- The uses identified for the **Apex** project are:
 - A 125,000 net square foot hotel
 - 200 apartments
 - 50,000 net square feet of retail space
- The uses identified for the **Division Street** parcel are:
 - 40,000 net square feet of office space
 - 70 condominium units
 - 10,000 net square feet of retail space



B&D Analysis: Apex Economic Benefits

- Based on the total project costs, it appears that the Apex site's total construction costs and economic benefits break down as follows:

Apex w/ Division Street Parcel	Dollars	Percent
Hard Costs	\$103.3 million	70% of Total Costs
Materials	\$62.0 million	60% of Hard Costs
Construction Wages	\$41.3 million	40% of Hard Costs
Soft Costs	\$44.3 million	30% of Total Costs
Total Costs	\$147.6 million	100 % of Total Costs

Apex w/ Division Street Parcel	Economic Activity	Wages	Jobs
Direct Benefits	\$19.0 million	\$16.6 million	309
Indirect Benefits	\$15.0 million	\$26.4 million	524
Total Benefits	\$34.0 million	\$43.0 million	832

Assumes 40% of wages, 20% of materials costs, and 15% of soft costs are sourced to Rhode Island.

B&D Analysis: Apex Project Fiscal Benefits

- B&D estimates direct fiscal benefits from the ancillary development phase from wages paid, construction management costs, and construction materials purchased.

State Revenue Source	Amount
Personal Income Tax	\$1,550,000
Business Corporation Tax	\$87,000
Sales and Use Tax	\$4,341,000
Realty Transfer Tax	\$105,000
Total State Tax Revenue	\$6,083,000

- B&D retains its 3.61 percent effective personal income tax rate assumption.
 - Using ORA's TY 2014 effective personal income tax rate of 3.17 percent, personal income taxes of \$1,363,100 rather than \$1,550,000.

B&D Analysis: Apex Project Fiscal Benefits

- The business corporation tax estimate implies that RI apportioned net income from the Apex site development is \$1,242,857.
 - B&D has indicated that a 60% apportionment factor applies to the business corporation tax implying total net income of \$2,071,428 from the project.
 - A 50% apportionment factor reduces business corporation tax revenues by \$14,500 to \$72,500.
- B&D's sales and use tax estimate of \$4,341,000 is the maximum amount that could be realized since sales tax paid to other states is included in this figure.
 - It is important to note that the actual realization of sales tax revenues from materials purchased is contingent on there being no project based sales tax exemption as has been common under the Rebuild Rhode Island program (and the Project Status designation before that).

REMI Analysis: Apex Construction Benefits

- ORA used the full version of the REMI model of the state's economy to analyze the economic impact of the ancillary construction at the Apex site.
- ORA broke this construction out over three years, 2020 through 2022, as follows:

Component	2020	2021	2022
<u>Division Street</u>	\$37.3 million	--	--
Hard Costs	\$26.1 million		
Soft Costs	\$11.2 million		
<u>Apex Site</u>	--	\$47.8 million	\$62.5 million
Hard Costs		\$25.7 million	\$51.5 million
Soft Costs		\$22.1 million	\$11.0 million

REMI: CY 2020 Apex Construction Benefits

Model Output	Construction Sector	Professional, Scientific, and Technical Services	Other Industries (17 in total)	Total
Net GDP	\$15,412,003	\$5,343,989	\$10,887,394	\$31,643,386
Total Private Employment	203	57	99	359
Direct Effect	180	46	0	226
Indirect Effect	1	9	38	48
Induced Effect	0	1	60	61
Investment Activity Demand	22	1	2	25
Government Employment	--	--	--	10
Total Wages	\$8,336,378	\$2,925,530	\$4,732,334	\$15,994,242

- Other Industries employment includes: retail trade, 27; health care and social assistance, 15; accommodation and food services, 11; and other services, 10.

REMI: CY 2021 Apex Construction Benefits

Model Output	Construction Sector	Professional, Scientific, and Technical Services	Other Industries (17 in total)	Total
Net GDP	\$16,363,928	\$9,982,327	\$14,384,874	\$40,731,129
Total Private Employment	207	101	120	428
Direct Effect	171	87	0	259
Indirect Effect	1	12	47	60
Induced Effect	0	1	72	73
Investment Activity Demand	35	1	3	39
Government Employment	--	--	--	17
Total Wages	\$8,943,314	\$5,452,342	\$6,363,343	\$20,758,999

- Other Industries employment includes: retail trade, 31; health care and social assistance, 18; accommodation and food services, 14; and other services, 12.

REMI: CY 2022 Apex Construction Benefits

Model Output	Construction Sector	Professional, Scientific, and Technical Services	Other Industries (17 in total)	Total
Net GDP	\$31,171,214	\$5,990,461	\$20,036,992	\$57,198,667
Total Private Employment	379	59	164	602
Direct Effect	329	42	0	371
Indirect Effect	1	13	65	79
Induced Effect	0	1	102	103
Investment Activity Demand	49	2	3	54
Government Employment	--	--	--	25
Total Wages	\$16,931,351	\$3,436,489	\$9,364,969	\$29,732,809

- Other Industries employment includes: retail trade, 47; health care and social assistance, 26; accommodation and food services, 19; and other services, 16.

ORA Estimate: Apex Project Fiscal Benefits

Revenue Source	% of 2020 GDP	2020 Revenue Estimate	% of 2021 GDP	2021 Revenue Estimate	% of 2022 GDP	2022 Revenue Estimate
Personal Income Tax (PIT)	2.05%	\$649,501	2.03%	\$828,161	2.01%	\$817,226
Business Corporation Tax (BCT)	0.22%	\$68,646	0.21%	\$87,104	0.21%	\$86,248
Sales and Use Tax (SUT)	1.69%	\$533,352	1.65%	\$674,059	1.63%	\$662,412
Sub-Total PIT, BCT, SUT	3.96%	\$1,251,499	3.90%	\$1,589,325	3.84%	\$1,565,885
Total Taxes (including PIT, BCT, SUT)	4.70%	\$1,486,330	4.62%	\$1,882,722	4.55%	\$1,853,097
Total Taxes and Departmental Receipts	5.28%	\$1,670,511	5.19%	\$2,112,253	5.10%	\$2,076,202
Total General Revenues	5.83%	\$1,845,316	5.70%	\$2,321,178	5.59%	\$2,275,542

B&D Assumptions: Tidewater Construction Phase

- The uses identified for the **Tidewater** project are:
 - 50,000 net square feet of office space
 - 12,000 net square feet of retail space
- The uses identified for the **Division Street** parcel are:
 - 40,000 net square feet of office space
 - 70 condominium units
 - 10,000 net square feet of retail space



B&D Analysis: Tidewater Economic Benefits

- Based on the total project costs, it appears that the Tidewater site's total construction costs and economic benefits break down as follows:

Tidewater w/ Division Street Parcel	Dollars	Percent
Hard Costs	\$36.0 million	70% of Total Costs
Materials	\$21.6 million	60% of Hard Costs
Construction Wages	\$14.4 million	40% of Hard Costs
Soft Costs	\$15.4 million	30% of Total Costs
Total Costs	\$51.4 million	100 % of Total Costs

Tidewater w/ Division Street Parcel	Economic Activity	Wages	Jobs
Direct Benefits	\$6.6 million	\$5.8 million	107
Indirect Benefits	\$5.2 million	\$9.2 million	182
Total Benefits	\$11.8 million	\$15.0 million	290

Assumes 40% of wages, 20% of materials costs, and 15% of soft costs are sourced to Rhode Island.

B&D Analysis: Tidewater Project Fiscal Benefits

- B&D estimates direct and indirect fiscal benefits from the ancillary development phase from wages paid, construction management costs, and construction materials purchased.

State Revenue Source	Amount
Personal Income Tax	\$540,000
Business Corporation Tax	\$30,000
Sales and Use Tax	\$1,511,000
Realty Transfer Tax	\$105,000
Total State Tax Revenue	\$2,081,000

- B&D retains its 3.61 percent effective personal income tax rate assumption.
 - Using ORA's TY 2014 effective personal income tax rate of 3.17 percent, personal income taxes of \$475,500 rather than \$540,000.

B&D Analysis: Tidewater Project Fiscal Benefits

- The business corporation tax estimate implies that RI apportioned net income from the Tidewater site development is \$428,571.
 - B&D has indicated that a 60% apportionment factor applies to the business corporation tax implying total net income of \$714,286 from the project.
 - A 50% apportionment factor reduces business corporation tax revenues by \$5,000 to \$25,000.
- B&D's sales and use tax estimate of \$1,511,000 is the maximum amount that could be realized since sales tax paid to other states is included in this figure.
 - It is important to note that the actual realization of sales tax revenues from materials purchased is contingent on there being no project based sales tax exemption as has been common under the Rebuild Rhode Island program (and the Project Status designation before that).

REMI Analysis: Tidewater Construction Benefits

- ORA used the full version of the REMI model of the state’s economy to analyze the economic impact of the ancillary construction at the Tidewater site.
- Due to the significantly smaller size of the Tidewater site, ORA assumed that all of the construction could be completed in a year:

Component	2020	Component	2020	Component	2020
<u>Division Street</u>	\$37.3 million	<u>Tidewater Site</u>	\$14.1 million	<u>Combined</u>	\$51.4 million
Hard Costs	\$26.1 million	Hard Costs	\$9.9 million	Hard Costs	\$36.0 million
Soft Costs	\$11.2 million	Soft Costs	\$4.3 million	Soft Costs	\$15.4 million

REMI: CY 2020 Tidewater Construction Benefits

Model Output	Construction Sector	Professional, Scientific, and Technical Services	Other Industries (17 in total)	Total
Net GDP	\$21,246,556	\$7,358,862	\$15,008,077	\$43,613,495
Total Private Employment	280	77	138	495
Direct Effect	249	63	0	312
Indirect Effect	1	12	54	67
Induced Effect	0	1	83	84
Investment Activity Demand	30	1	3	34
Government Employment	--	--	--	13
Total Wages	\$11,492,960	\$4,028,870	\$10,151,402	\$22,047,232

- Other Industries employment includes: retail trade, 37; health care and social assistance, 21; accommodation and food services, 15; and other services, 14.

ORA Estimate: Tidewater Project Fiscal Benefits

Revenue Source	% of 2020 GDP	2020 Revenue Estimate
Personal Income Tax (PIT)	2.05%	\$895,196
Business Corporation Tax (BCT)	0.22%	\$94,613
Sales and Use Tax (SUT)	1.69%	\$735,110
Sub-Total PIT, BCT, SUT	3.96%	\$1,724,919
Total Taxes (including PIT, BCT, SUT)	4.70%	\$2,048,582
Total Taxes and Departmental Receipts	5.28%	\$2,302,435
Total General Revenues	5.83%	\$2,543,365

ECONOMIC IMPACTS: ANCILLARY DEVELOPMENT OPERATIONS

B&D Analysis: Apex Project Operations Impact

- B&D estimates direct and indirect Apex/Division Street project operations benefits as follows:

	Economic Activity	Wages	Jobs
Direct Benefits	\$11.6 million	\$7.2 million	195
Indirect Benefits	\$31.0 million	\$9.0 million	168
Total Benefits	\$42.6 million	\$16.2 million	363

- B&D estimates an average wage of \$45,000 for the direct and indirect jobs that are located at the Apex and Division Street sites.
 - Estimated average wage for direct benefits jobs is \$36,923.
 - Estimated average wage for indirect benefits jobs is \$53,571.
- ORA was unable to model the economic benefits of the operations of the hotel, retail space, office facilities and residential dwellings without greater detail.

B&D Analysis: Apex Operations Fiscal Benefits

- B&D estimates direct fiscal benefits from Apex/Division Street project operations as follows:

Revenue Source	Rate	2020	2021	2022	2023	2024
Personal Income Tax	3.75% - 5.99%	\$ 271,000	\$ 279,000	\$ 287,000	\$ 296,000	\$ 305,000
Sales Tax	7.0%	1,145,000	1,180,000	1,215,000	1,252,000	1,290,000
State Hotel Tax	5.0%	378,000	389,000	401,000	413,000	426,000
Local Hotel Tax	1.0%	75,600	77,900	80,200	82,600	85,100
Local Meal and Beverage Tax	1.0%	11,000	12,000	12,000	12,000	13,000
Property Tax		1,418,000	1,432,000	1,446,000	1,461,000	1,476,000
City of Pawtucket		\$1,504,600	\$1,521,900	\$1,538,200	\$1,555,600	\$1,574,100
State of Rhode Island		\$1,794,000	\$1,848,000	\$1,903,000	\$1,961,000	\$2,021,000
<i>Annual Total</i>		<i>\$3,298,600</i>	<i>\$3,369,900</i>	<i>\$3,441,200</i>	<i>\$3,516,600</i>	<i>\$3,595,100</i>

ORA Assessment: Apex Ops Fiscal Benefits

- ORA broke down the sales tax generated from the Apex project as follows:

Year of Operation	Total Sales Tax	Meal and Beverage Sales Tax	Lodging Sales Tax	All Other Sales Tax
2020	\$1,145,000	\$77,000	\$529,200	\$538,800
2024	\$1,290,000	\$91,000	\$596,400	\$602,600

- The 2020 lodging sales tax estimate for the Apex site would make Pawtucket the 7th highest in the state for lodging sales taxes (based on FY 2020 projections).
- The 2020 total sales tax generated by Apex site would increase Pawtucket's total sales tax collections by 8.0% (vs. FY 2017 Pawtucket sales tax collections).
- Apex sales tax per square foot of retail space is \$10.26 vs. \$11.08 at PPM.

ORA Assessment: Apex Ops Fiscal Benefits

- B&D estimates \$271,000 in state income taxes from the Apex/Division Street project in 2020, increasing to \$305,000 in 2024.

Year of Operation	Total Income Tax	Number of Direct Jobs	Income Tax per Direct Job	Average RI AGI to Generate Income Tax *
2020	\$271,000	195	\$1,390	\$49,267
2024	\$305,000	195	\$1,564	\$53,907

* Assumes single filing status with no modifications to federal AGI and no use of tax credits

- Observations on the revenue estimates derived by B&D for **2020**:
 - B&D includes \$378,000 in state hotel tax revenues as a state fiscal benefit.
 - Commerce receives 28 percent of this revenue, or \$105,840.
 - B&D includes \$75,600 in transient occupancy tax revenues as a local fiscal benefit. The actual amount should be \$170,100 given the local share of the state hotel tax is 25%.

B&D Analysis: Tidewater Project Operations

- B&D estimates direct and indirect Tidewater Project operations benefits as follows:

	Economic Activity	Wages	Jobs
Direct Benefits	\$3.5 million	\$12.2 million	291
Indirect Benefits	\$28.8 million	\$11.3 million	153
Total Benefits	\$32.3 million	\$23.5 million	444

- B&D estimates an average wage of \$53,000 for the direct and indirect jobs that are located at the Tidewater and Division Street sites.
 - Estimated average wage for direct benefits jobs is \$41,924.
 - Estimated average wage for indirect benefits jobs is \$73,856.
- ORA was unable to model the economic benefits of the operations of the retail space, office facilities and residential dwellings without greater detail.

B&D Analysis: Tidewater Ops Fiscal Benefits

- B&D estimates direct fiscal benefits from Tidewater/Division Street project operations as follows:

Revenue Source	Rate	2020	2021	2022	2023	2024
Personal Income Tax	3.75% - 5.99%	\$ 458,000	\$ 472,000	\$ 486,000	\$ 500,000	\$ 515,000
Sales Tax	7.0%	196,000	203,000	209,000	215,000	222,000
Property Tax		735,000	743,000	750,000	758,000	765,000
City of Pawtucket		\$735,000	\$743,000	\$750,000	\$758,000	\$765,000
State of Rhode Island		\$654,000	\$675,000	\$695,000	\$715,000	\$737,000
<i>Annual Total</i>		<i>\$1,389,000</i>	<i>\$1,418,000</i>	<i>\$1,445,000</i>	<i>\$1,473,000</i>	<i>\$1,502,000</i>

- Sales tax revenue generated by the Tidewater project is only from all other sales.
- Tidewater sales tax per square foot of retail space is \$8.91 vs. \$11.08 at PPM.

ORA Assessment: Tidewater Ops Fiscal Benefits

- B&D estimates \$458,000 in state income taxes from the Tidewater/Division Street project in 2020, increasing to \$515,000 in 2024.

Year of Operation	Total Income Tax	Number of Direct Jobs	Income Tax per Direct Job	Average RI AGI to Generate Income Tax *
2020	\$458,000	291	\$1,574	\$54,173
2024	\$515,000	291	\$1,770	\$59,400

* Assumes single filing status with no modifications to federal AGI and no use of tax credits

- Observations on the revenue estimates derived by B&D for 2020:
 - In the Tidewater/Division Street project scenario the revenues attributed to the state are in fact general revenues to the state.
 - As was the case with the Apex project, the RI AGI needed to generate the income tax revenues estimated by B&D are greater than the average wage.

Thank You

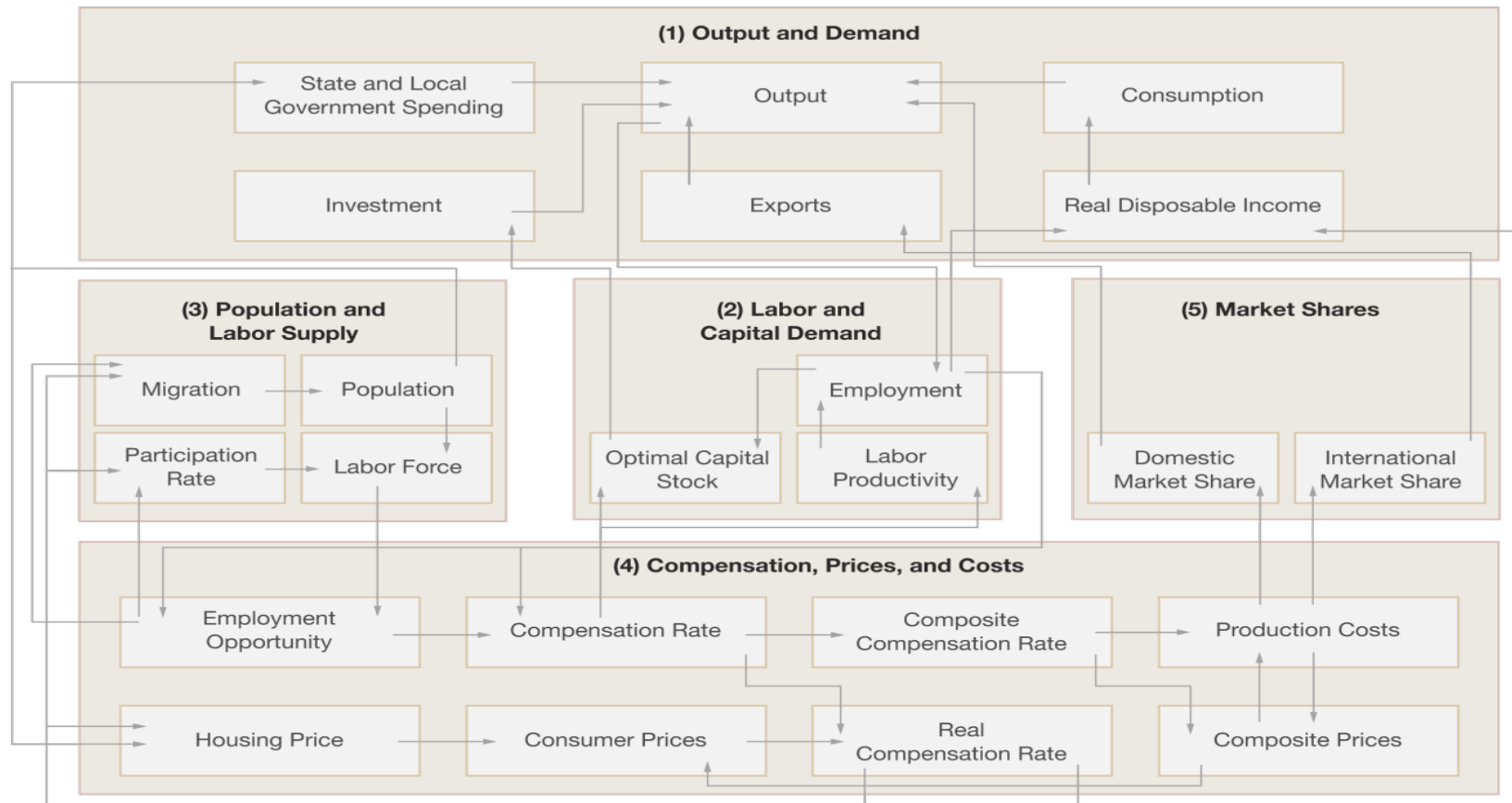
DETAILS OF THE ECONOMIC MODELS

ORA: The Economic Impact Model

- ORA used the REMI PI+ model of the state's economy to analyze the economic impact of the new PawSox stadium and the ancillary development.
- The REMI PI+ model consists of five major blocks:
 - Output and Demand
 - Includes output, demand, consumption, investment, government spending, import, commodity access, and export concepts.
 - Labor and Capital Demand
 - Includes the determination of labor productivity, labor intensity, and the optimal capital stocks.
 - Population and Labor Supply
 - Includes detailed demographic information about the region.
 - Compensation, Prices, and Costs
 - Includes delivered prices, production costs, equipment cost, the consumption deflator, consumer prices, the price of housing, and the compensation equation.
 - Market Shares
 - Measure the proportion of local and export markets that are captured by each industry.

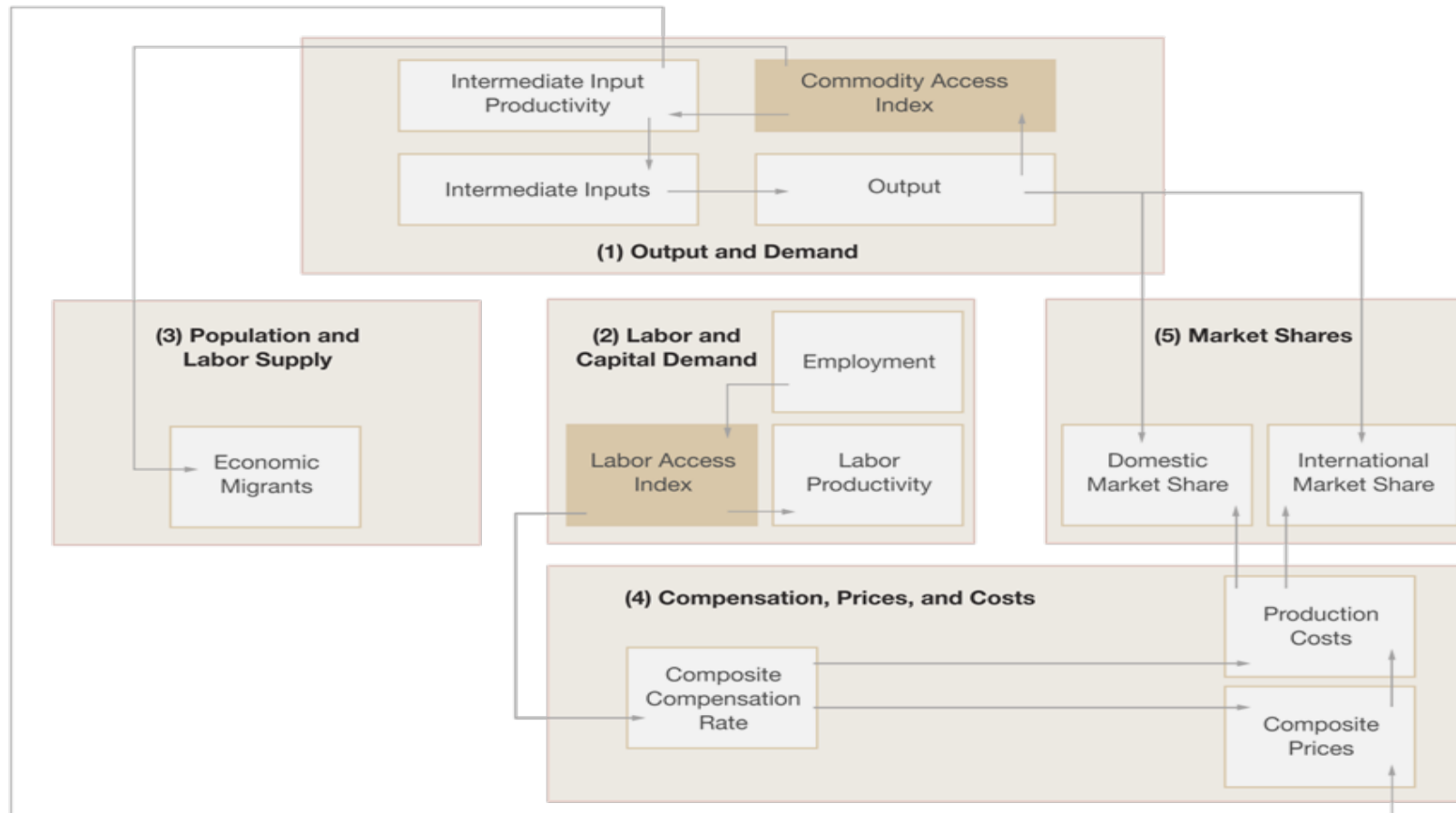
ORA: The Economic Impact Model

REMI Model Linkages (Excluding Economic Geography Linkages)



ORA: The Economic Impact Model

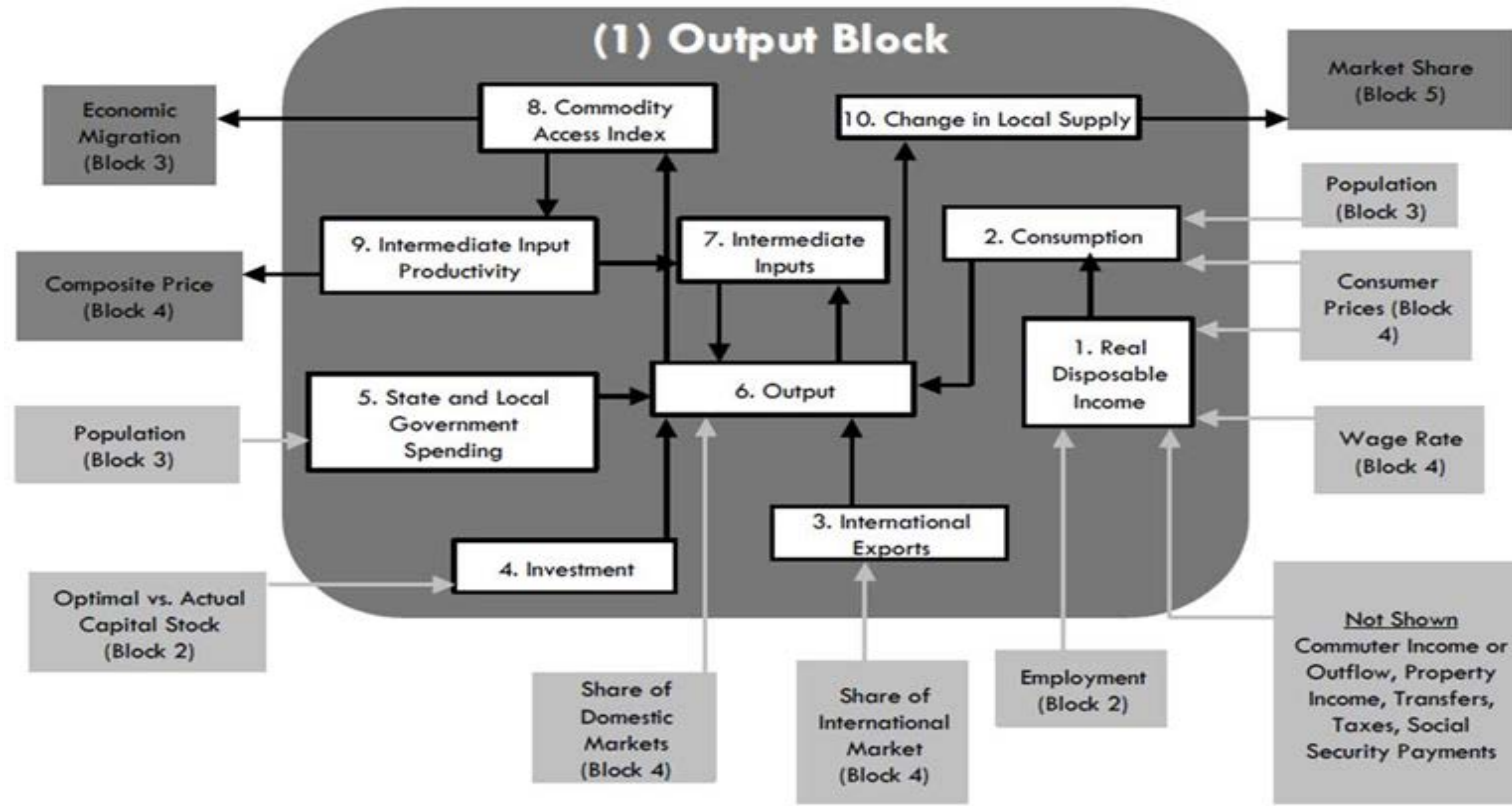
Economic Geography Linkages



ORA: Economic Model Output Block

- The REMI PI+ Output Block Includes All Items in

Key Endogenous Linkages in the Output Block



B&D: Economic Model Output Block

- The RIMS-II Input-Output Model Includes All Items in

Factors Included in Standard Input-Output Models

