

# Development of Mellon Arena Site

## Comparative Economic Benefit Analysis

### Methodology & Assumptions

#### METHODOLOGY

For purposes of eliminating as many 'subjective' criteria as possible, the analysis utilized the real estate 'use' programs specified in each plan, and applied equal cost and revenue metrics to each plan. By way of example, the cost to construct office space per square foot is the same in both analyses and the revenue generated per square foot is the same. Likewise, the employment generation, tax revenues, etc. utilize the same criteria for each plan, and the costs for providing the necessary road infrastructure were allocated proportionately.

#### TASK

Prepare a general comparative economic benefit analysis of development plans contemplated for the Mellon Arena Site.

#### PLANS

Option 1 is a plan to mothball the Mellon Arena and continue to use the site for parking. Option 3 works with data provided by plans which contemplate keeping Mellon Arena in an altered state, reutilizing the facility for to-be determined public uses, constructing a hotel within the footprint, and redeveloping the remaining site acreage. Option 5 contemplates plans to remove the Arena, construct new street grid, and develop the entire site according to a new master plan.

#### ASSUMPTIONS

##### Infrastructure Costs

Estimates provided by the various plans and their consultants were used in this analysis. In cases where 'unit costs' differed between plans, a new unit cost was used and applied to each plan equally. In cases where costs were incomplete or omitted the 'equalized' unit costs were applied to complete the data.

##### Development Program Components

The residential, retail, office, hospitality, parking and other development components for each plan are substantially consistent with those proposed by the proponents.

##### Development Costs

Identical per unit costs were used for each plan's program components. Option 3 data for the Arena reuse and Option 5 data for its removal were provided by each plan proponent.

# **Development of Mellon Arena Site**

## **Comparative Economic Benefit Analysis**

### **Methodology & Assumptions – Continued**

#### Income Projections

Identical per unit residential sales prices and rental rates, as well as, the same rental rates for office and retail space were used. Each plan's 'parking' component was assumed to generate the same net profit and pay for the cost of construction.

#### Construction Job Creation and Permanent Employment

Identical assumptions based upon the construction costs and the amount of completed office and retail space were used to calculate the construction and on-going employment figures.

#### Employment and Real Estate Tax Revenue

Equal metrics were applied to each plan to calculate the results.

#### PUBLIC SUBSIDIES

It is likely that infrastructure costs and certain costs for public amenities pursuant to the reuse of the Arena (should that alternative be chosen) will create the need for City, County, State and/or Federal assistance. At this time no federal funding is assumed.

#### DEVELOPMENT TIME FRAME

Because of the size and scope of the alternative development plans, a timeframe of three (3) years for infrastructure was assumed; 50% of infrastructure costs the first year, 30% the second year, and 20%, or the balance in the third year. The overall real estate development programs were implemented over a ten (10) year basis; Development Period– 30%, Year 1 – 20%, Years 2-4 – 10% each, Years 5-6 - 5% each, and Years 7-10 – 2.5% each.

#### PRIVATE DEVELOPMENT CONSIDERATIONS

Private developers and their capital providers seek projects on the basis of the highest projected return with the least financial and other associated risks. Due to the size of this project and its diverse components it is likely that more than one developer will be needed for the successful completion of this project. Private developers will look for overall leveraged investment returns in the 20% range which is deemed suitable to assume the risk associated with development projects. The financial risks fall broadly into four categories: Development Costs, Income Projections, Debt Assumptions, and overall Development Schedules.

Other associated risks' are interrelated; the likelihood of public subsidy monies; the projected demand for potential development uses, in this case, office, retail, and residential; the flexibility of the project development site and/or constraints, whichever the case may be; and the local community support for the project. It is unlikely that private developers will assume any risk associated with the reuse of the Arena and this alternative will require initial and on-going public subsidy.

## Development of Mellon Arena Site Program Components

Option 3 Plan (Arena Reuse)			Option 5 Plan (Arena Demo) <sup>1</sup>		
Real Estate Segment		Units/SF	Real Estate Segment		Units/SF
Residential			Residential		
	Housing For Sale	232		Housing For Sale	206
	Housing For Rent	249		Housing For Rent	985
		481			1,191
Retail	Wylie & Quad Retail	185,000	Retail	Neighborhood, Theatre, Entertainment	208,750
Office <sup>2</sup>	Class A Office Space	510,000	Office	Class A Office Space	608,550
Hospitality <sup>3</sup>	Select Service (Keys)	150	Hospitality	Select Service (Keys)	150
Parking	4-Level Garage & Structured	2,117	Parking	Structured Parking	2,145
Public Park Area - Arena Interior		94,100	Public Park Area		57,560

## Development of Mellon Arena Site Site Infrastructure Comparative Analysis

Composite Estimates from Review of Alternative Development Plans <sup>4</sup>

Description		Option 1 Plan	Option 3 Plan Arena Reuse	Option 5 Plan Arena Demo
Mellon Arena (1-Mothball cost 3-partial demolition and restoration for reuse 5-Removal cost)		TBD	\$ 1,885,000	\$ 3,900,000
Mellon Arena Site Grading/Preparation			\$ -	\$ 1,100,000
Arena Interior/Public Open Space Preparation for Recreation, Concerts, Festivals <sup>5</sup>			\$ 9,410,000	\$ -
Remove Existing Mario Lemieux Place			\$ -	\$ 268,579
Remove Existing Parking Lots			\$ 444,891	\$ 444,891
New Wylie Avenue (Option 5-Washington to Crawford/Option 3 Arena to Crawford)			2,142,499	\$ 5,356,247
New Mario Lemieux Place (Option 5 from Centre to Bedford/Option 3 Upgrade for new Development)			\$ 1,162,164	\$ 2,905,409
New Logan Street (from Centre to Bedford)			\$ -	\$ 2,776,655
New Fulton Street (from Center to Bedford)			\$ 2,784,195	\$ 2,784,195
New Development Road (from Crawford West)			\$ 722,038	\$ 722,038
New Development Quads (site work for 9 quads)			\$ 4,400,000	\$ 4,400,000
<b>Total Cost</b>			<b>\$ 22,950,786</b>	<b>\$ 24,658,014</b>
	% of Cost		Option 3 Plan	Option 5 Plan
<b>Soft Costs</b>				
Environmental & Cultural Assessments	1.5%		\$ 344,262	\$ 369,870
Design Costs	3.0%		\$ 688,524	\$ 739,740
Design Contingency 5%	3.8%		\$ 860,654	\$ 924,676
Project Oversight and Inspection	2.3%		\$ 516,393	\$ 554,805
Administration Fee	0.8%		\$ 172,131	\$ 184,935
Construction Contingency 4%	3.0%		\$ 688,524	\$ 739,740
Project Power Allowance	0.4%		\$ 86,065	\$ 92,468
Owner Engineering Costs	0.4%		\$ 86,065	\$ 92,468
<b>Soft Costs Totals</b>	<b>15.0%</b>		<b>\$ 3,442,618</b>	<b>\$ 3,698,702</b>
<b>Total Estimated Infrastructure Cost</b>			<b>\$ 26,393,404</b>	<b>\$ 28,356,716</b>

## Development of Mellon Arena Site Comparative Economic Benefit Analysis <sup>6</sup>

	Option 1 ( Do Nothing Plan)	Option 3 (Arena Reuse)	Option 5 (Arena Demo)	Difference between Option 3 & 5
<b>Public Entity Return on Investment</b>				
Total Public Economic Benefit	TBD	\$ 53,825,425	\$ 103,526,699	\$ 49,701,273
Potential State/Local Infrastructure-Arena Reuse Subsidy		\$ 26,393,404	\$ 28,356,716	\$ 1,963,312
Net Public Benefit after Subsidies		\$ 27,432,021	\$ 75,169,983	\$ 47,737,962
<b>Job Creation</b>				
Total Project Costs / Construction and Permanent Jobs		\$ 295,011,904	\$ 410,328,636	\$ 115,316,732
Temporary Construction Employment				
Jobs		2,795	3,887	1,092
Wages		\$ 106,204,286	\$ 147,718,309	\$ 41,514,023
Permanent Employment				
Jobs by Year-10		2,498	2,940	442
Annual Wages by Year-10		\$ 71,998,563	\$ 84,022,482	\$ 12,023,919
<b>Public Economic Benefits Summary</b>				
Estimated Construction Employment Wage Taxes				
Local and State Wage Taxes		\$ 3,989,927	\$ 5,549,544	\$ 1,559,616
Estimated Permanent Wage Taxes and Real Estate Taxes				
Local/State Wage Taxes (10-year totals)		\$ 21,176,096	\$ 24,701,190	\$ 3,525,093
Real Estate Taxes (10-year totals)		\$ 41,672,868	\$ 73,275,965	\$ 31,603,097
Total Gross Public Economic Benefits		\$ 66,838,891	\$ 103,526,699	\$ 36,687,807
Arena Operating Costs (10-year totals)		\$ (13,013,466)	\$ -	\$ 13,013,466
Total Public Economic Benefits		\$ 53,825,425	\$ 103,526,699	\$ 49,701,273

## **DEVELOPMENT OF ARENA SITE**

### Comparative Investment Return Analysis

#### Notes

- 1 A cleared unconstrained site with new street grid which will reconnect the Hill to Downtown presents the best opportunity for private developers to design cost effective and economically viable real estate investments for the residential, retail, office, and hospitality components. It is likely that multiple private parties with expertise in each of these areas will be interested in pursuing the potential of this 28 acre site.
- 2 The amount and configuration of office space as conceived for the reuse plans rely on very high density with minimal setbacks. The views from a large portion of the office space will be the exterior wall of the Arena. As currently designed the cost to construct curved walls for Class A multi-tenant office space will be in excess of the projections contained in this report. Changing to a more conventional design will bring costs in line, but will likely result in much less space than programmed.
- 3 The hotel included in the reuse plan as configured 'inside' the dome presents numerous issues and is likely not economically feasible. A single-loaded corridor with rooms on only one side is contemplated because only one-side of the hotel would have views. Single-loaded corridor hotels are more expensive to build and are operationally inefficient.
- 4 The site infrastructure estimates are preliminary in nature but reflect a composite of estimates prepared for a number of plans. There is some question as to the viability of the existing Mario Lemieux Way under the reuse plan to meet the level of service required by the new reuse plan Arena activities and the adjacent new development uses.
- 5 This report considers the Arena public space as part of the public infrastructure costs for the reuse plan since a private developer would have no return on investment from this feature and would not be able to absorb the on-going maintenance and operational costs.
- 6 The 'equalized' unit cost methodology provides the most objective approach to an economic analysis, but by its nature does not consider the overall benefit of a cleared 28 acre development site nor does it consider the site impediments imposed by reusing the Arena. The development areas surrounding the Arena result in constrained sites for the proposed development uses which will add to costs and restrict the marketability of certain real estate components, namely office and some residential uses