Paul Vander Schaaf

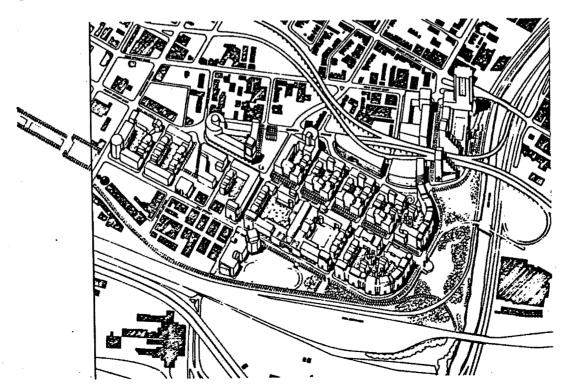
Executive Summary

Introduction

This report examines the Ataratiri housing project focusing on a financial analysis of the project. The report examines the chronology of the events of the project in an attempt to understand what occurred during the life of the project. The report also examines the financial forecasting of the project's business plans in an attempt to understand how costs and revenues changed during the life of the project. Sensitivity analysis of the project's financial plans was also conducted to examine how different financial scenarios would affect the financial position of the project.

Ataratiri was a joint initiative housing project between the City of Toronto and the Province of Ontario to provide over 7000 housing units in downtown Toronto. The project, announced in July 1988, was an attempt to redevelop 32.5 hectares of derelict industrial land, in the south east corner of the city, into a thriving community for 14,000 people. Ataratiri was announced as a housing project which upon completion would "break even" financially. In March 1992, the project was terminated after an examination into the financial position of the project revealed the housing development would produce a deficit of over \$688 million by the time the project was completed in 2001.

Figure 1. Ataratiri Site Plan



Several factors were cited as reasons why the project was canceled. Two factors were especially important to the cancellation of the project. First, the sharp decline in revenues due to the economic recession that had hit Ontario in the late 1980's created uncertainty in the future financial position of the project. Coupled with a decrease in revenues, a dramatic increase in expenditures, especially the cost of soil remediation, added to the financial uncertainty of the project.

Financial Analysis

The 1988 and 1991 Business Plans for Ataratiri

In 1988, the city and province announced a joint initiative to create both social and affordable, market housing at Ataratiri. The project was based on initial forecasts that, upon completion, the project would break even financially. The financial projections for the project were based on early estimates of the costs and revenues associated with the project. The early projections, illustrated in the following table, produced a deficit of \$7 million.

Table 1. Comparison of 1988 and 1991 Revenues and Expenditures

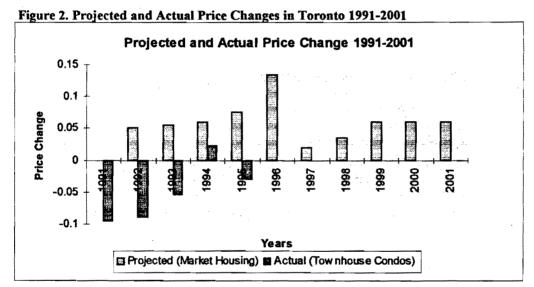
	1988	1991	Change	
	(1988 dollars)	(1991 dollars)	Dollars	Percentage
Costs				
Land Assembly	\$370.00	\$274.30	(\$95.70)	-26%
Environmental Costs	\$30.00	\$183.20	\$153.20	511%
Consulting	\$11.20	\$18.90	\$7.70	69%
Demolitions	\$3.80	\$6.00	\$2.20	-58%
Hard Infrastructure	\$29.00	\$40.40	\$11.40	39%
Floodproofing	not recorded	\$25.30	\$25.30	
Total	\$444.00	\$548.10	\$104.10	23%
Revenues	\$437.00	\$450.20	\$13.20	3%
Interest	not recorded	(\$590.30)	(\$590.30)	
Cumulative Future Value	not recorded	(\$688.20)	(\$688.20)	
Net Present Value	not recorded	(\$259.10)	(\$259.10)	

By 1991, when the last business plan was released, the financial position of the project had changed dramatically. Instead of producing a "break even" project, Ataratiri was expected to produce a deficit of

over \$688 million by its completion. The change in financial position can be attributed to several factors which will now be discussed.

Revenues

Revenues for the project were to come primarily from land sales, with 88% coming from residential land sales. The price of land was expected to increase at an average of 6% per annum during the project. As Figure 2 illustrates, the actual price of housing in Toronto differed significantly from the projected land values. While the actual price of land sales was not calculated into the financial position of the project, the difference in land prices had an effect on the outcome of the project. The project was expected to produce a deficit of (\$688.3) million based on the projected increase in housing prices shown in Figure 2.



The actual price of housing in Toronto at the time of the last business plan had decreased significantly from the projected prices. Had the actual price of housing been calculated into the Cumulative Future Value of the project, the project deficit would have been worse. Eventhough the last business plan did not take these changes into account, the uncertainty involved with the final outcome of the project affected the decision on the termination of Ataratiri.

Expenditures

The two largest expenditures for Ataratiri were the expropriation costs to accumulate the land and soil remediation costs to clean the land. The cost to acquire the land and pay for business relocation costs actually decreased from 1988 to 1991. The cost in 1988 was based on market value of the land and

of land is developed by the city and province. Instead of developing the whole site, the city develops the first phase and develops a comprehensive master plan for the site. The remaining phases of the project are developed by the private sector. This scenario produces a negative CFV and a negative NPV for the development, but the financial position of the project is much better in comparison to the 1991 plan, as illustrated in Table 5. This scenario requires a lot of investment and involvement by the private sector and thus, the development would take substantially longer to complete. However, with private sector involvement, the project would be completed with little investment from the public sector.

Table 5. Scenario #4- Developing Strategic Parcels of Land for First Phase

	1988	1991	1991 Strategic Parcels	Difference 1991- Strategic Parcels
Cumulative Cash Flow	(\$7.00)	(\$687.72)	(\$69.79)	\$617.93
Net Present Value	(\$135.00)	(\$168.75)	(\$39.40)	\$129.35
Interest Charges	(\$232.68)	(\$589.82)	(\$34.12)	\$555.70

The financial position of Ataratiri was affected by many variables, including interest charges, rising expenditures and decreasing revenues. Table 6 illustrates the change in financial position from 1988 to 1991 and its effect on the CFV of the project. The most significant finding from this table is that soil remediation costs and interest charges were the two variables which had the largest impact on the financial position of the project. The table illustrates that interest had a far more significant impact on the financial position of the project than any other cost. While project delays were factors which influenced interest charges, it was the financial structure itself which had such a large impact on the project's financial position. Had the project received funding from grants or interest free loans, the financial position would be dramatically different.

Table 6. Comparison of 1988, 1991 Plans and Effect on CFV

	1988	1991	Change 1988- 91	Change as Percent of CFV
CFV	(\$7.70)	(\$687.72)	(\$680.02)	100%
Revenues	\$437.00	\$450.20	\$13.20	2%
Land Acquisition	(\$370.00)	(\$274.30)	\$95.70	14%
Consulting/ Administration	(\$11.20)	(\$19.80)	(\$8.60)	1%
Soil Remediation	(\$30.00)	(\$183.20)	(\$153.20)	23%
Demolitions	(\$3.80)	(\$6.00)	(\$2.20)	0%
Floodproofing	\$0.00	(\$25.30)	(\$25.30)	4%
Hard Infrastructure	(\$29.00)	(\$40.40)	(\$11.40)	2%
Interest	(\$232.68)	(\$589.82)	(\$357.14)	53%

The next scenario involves pro-rating the floodproofing costs to Ataratiri (instead of charging the full cost of floodproofing to the project) as well as not charging soil remediation costs to Ataratiri's budget.

Instead, the cost for soil remediation would be paid for by grants similar to an Environmental Superfund present in the United States. The financial position of the project is much improved in this scenario, compared to the last business plan, but a negative cash flow is still produced. As Table 3 illustrates, the cost to service the debt of the project is reduced as early capital expenditures to clean the land are no longer charged to the project.

Table 3. Scenario #2 Floodproofing Costs are Pro-rated, Remediation Costs are Free

	1988	1991	1991 No Remediation Cost	Difference 1991- 1991 No Remediation
Cumulative Cash Flow	(\$7.00)	(\$687.72)	(\$227.03)	\$460.69
Net Present Value	(\$135.00)	(\$168.75)	(\$58.46)	\$110.29
Interest Charges	(\$232.68)	(\$589.82)	(\$334.79)	\$255.03

The third scenario examines the difference in the financial position of the project if the development is mothballed from 1992 to 1997, and then development continues from 1997 until completion of the project. The project is started again in 1997 due to better economic conditions for development. This scenario produces a financial position for the project which is substantially worse than if the project were to be completed according to the last business plan. This scenario produces a Cumulative Future Value for the project which is \$480 million worse than the 1991 plan, as illustrated in Table 4. The worsening of the financial position is mainly due to the fact that interest charges on capital outlays continues during the mothballing period, resulting in an additional \$484 million in interest charges.

Table 4. Scenario #3- "Mothballing the Project"

	1988	1991	1991 "Mothballing"	Difference 1991- 1991 "Mothballing"
Cumulative Cash Flow	(\$7.00)	(\$687.72)	(\$1,168.55)	(\$480.83)
Net Present Value	(\$135.00)	(\$168.75)	(\$198.18)	(\$29.43)
Interest Charges	(\$232.68)	(\$589.82)	(\$1,074.65)	(\$484.83)

The final sensitivity analysis examines a scenario dramatically different than the original plan for the development. This scenario examines the financial position of the project when only a small, strategic parcel

appropriate relocation costs. The cost in 1991 represents the actual cost to accumulate all the land, a decrease of 26% from 1988 projections.

The second largest expenditure was the cost to clean up the land due to its previous industrial use. The cost for soil remediation was initially set at \$30 million, the cost to scrape off the top layer of soil and send it to landfill. By 1991, the cost for soil remediation had increased over 500% to \$183 million. The significant increase in soil remediation costs was due to two factors. First, the soil was more polluted than originally thought and thus more soil would have to be cleaned. Secondly, the Ministry of Environment developed new guidelines for soil remediation which it stringently enforced, causing an increase in clean up costs and many delays in the progress of the project.

The rise in expenditures and the decrease in revenues threatened the life of the project. With too much uncertainty over the financial position of the project and too many delays in the progress of the project, Ataratiri was canceled. While no one factor can be cited as reason for the project's failure, the combination of higher than expected expenditures and lower than expected revenues effectively killed the project.

Sensitivity Analysis

This report performed sensitivity analysis on the financial position of the project to examine how different variables affect the financial position of the project. Four scenarios were examined, each analyzing the difference in financial position between the last business plan for Ataratiri and the sensitivity analysis.

The first scenario involves developing the project with no land acquisition costs charged to the Ataratiri budget. As the following table illustrates, this scenario produces a positive cash flow for the project substantially different tan the last business plan. The financial position of this scenario is mainly due to the fact that the project does not have high debt servicing costs because very little money is spent up front.

Table 2. Scenario #1- Land at no cost to Ataratiri

	1988	1991	1991 No Land Cost	Difference 1991- 1991 No land
Cumulative Cash Flow	(\$7.00)	(\$687.72)	\$145.11	\$832.83
Net Present Value	(\$135.00)	(\$168.75)	\$34.70	\$203.45
Interest Charges	(\$232.68)	(\$589.82)	(\$31.29)	\$558.53

Lessons Learned from Ataratiri

There are several lessons which public sector redevelopment agencies can learn from Ataratiri. The following is a highlight of the recommendations by the author on how public sector redevelopment agencies can improve their chances of successfully implementing projects.

The first lesson to be learned is that the redevelopment agency should have been an "arm's length" organization. At Ataratiri, the project team implemented the project from their respective city departments and provincial ministries. Creating an arm's length agency can remove the implementation of the project from the political arena of city and provincial governments. Implementing the project through a separate agency also creates the opportunity to employ private sector entrepreneurs who can increase ties between the development and private sector investment.

Another lesson that can be learned from Ataratiri is that the conceptual planning for the project should include those members who are going to implement the project. At Ataratiri, the conceptual planning for the project occurred in backroom, secretive meetings with little involvement by the project team. Once the senior government officials initiated the project, they handed it off to the project team. This meant that the project's advocates were no longer pushing the project. For public sector projects to be successful, they must have continual backing of senior governmental officials so when problems occur, decisions affecting the project can be made. Furthermore, when conceptual planning for projects occurs, all relevant actors and interests should be examined in order to determine if and how the project will change once brought to the attention of the public.

Redeveloping industrial lands into vibrant communities requires a lot of time and investment in a project. In order to keep a project of this nature on time and on budget, accurate monitoring of the financing of a project is imperative. One way to accomplish this goal is to organize a project team with a full time Project Manager and a full time Financial Controller. These two people will be responsible for the successful implementation of a project and will thus monitor closely both the scheduling of development and capital outlays required to complete the project. Ataratiri did not monitor its expenditures closely, as the audit into the project found, nor did it monitor the progress of the development in comparison to the schedule.

Monitoring these two areas of development will reduce delays, and thus interest costs, and will emphasize those areas of the project which need to be improved.