

15 March 2011

Mr Sam Haddad
Director General
Department of Planning
23 – 33 Bridge Street
SYDNEY NSW 2000



Dear Mr Haddad

**MP09_0076 - City One Project, Wynyard
Public Benefit & Commercial Arrangements**

As you may be aware, Thakral has been in detailed discussion with Transport NSW (TNSW) concerning the above project. The public benefits of the scheme are partly described in the Preferred Project Report to be submitted to the Department in the near future.

The purpose of this letter is to set out the anticipated arrangements between TNSW and Thakral in relation to the project and to further clarify the extent of public benefits that will be provided to the State.

Thakral's commercial offer to TNSW is currently under evaluation under the *Working with Government Guidelines*. The offer consists of three (3) parts:

1. Economic Appraisal by Deloitte dated 3 March 2011 in relation to the new through site link and associated works – Value \$60m;
2. Public Infrastructure works to be provided during the redevelopment, assessed by WT partnership - Value \$20m;
3. Further contractual and commercial considerations including additional monetary contributions to be finalised with TNSW.

As you will appreciate, the discussions between TNSW and Thakral are Commercial in Confidence and are in the process of being finalised. However, it is clear that parts (1) and (2) above can be explained in further detail to support the project in order to sufficiently demonstrate the public benefits without prejudicing the final commercial arrangements contained in item (3) above.

1. Economic Appraisal.

Deloitte were commissioned to review the economic benefits of the new link between George and Carrington Streets and subsequent entry to the station (see figure 1 below). The quantifiable benefits can be summarised as follows:

Wynyard Access and Crowding benefits	\$28,187,000
Amenity improvement benefits	\$19,686,000
Generated fare revenue	\$9,869,000
Avoided externalities from diverted road trips	\$766,000
Avoided congestion from diverted road trips	\$1,334,000
Total economic benefits	\$59,843,000

The Deloitte report is focused on the area between George and Carrington Streets and is as highlighted in the grey section of figure 1. It does not include any benefits outside of this specific area.

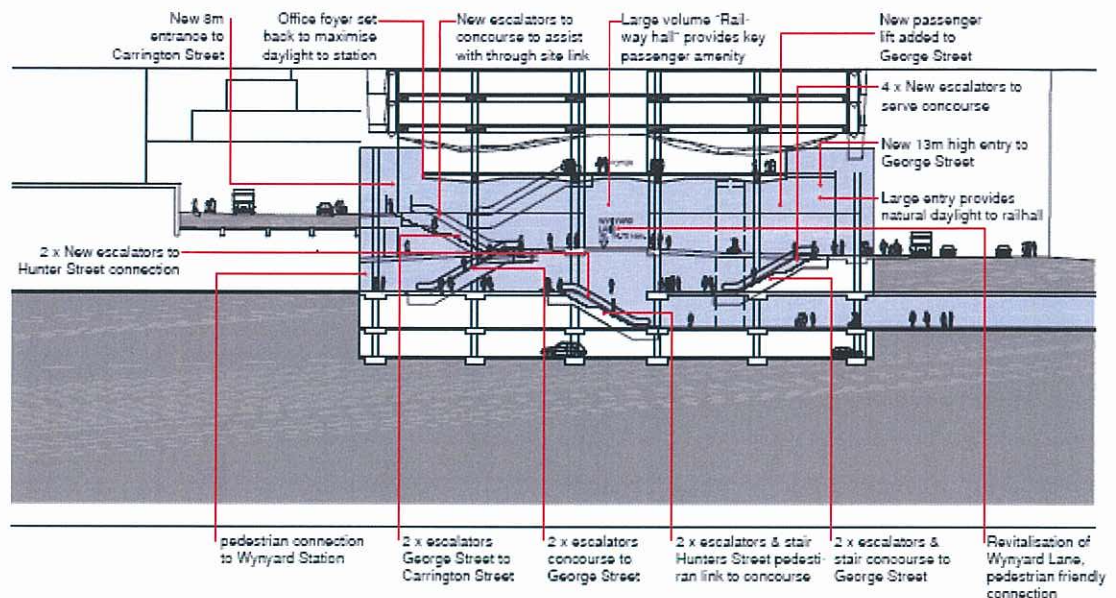


Figure 1 – New Through-site link

2. Public Infrastructure Works

WT partnership were commissioned to assess the component of public infrastructure works directly associated with the public connections from George and Carrington Streets. These costs were proportionally adjusted to exclude costs associated with the commercial side of the development and focused on the works directly attributable to the 20m TNSW requirement including the volume of the 13m high entry point from George Street. These public infrastructure works can be seen in Figure 1 and are summarised as follows:

Additional structure cost for thoroughfare area	\$5,000,000
Additional through site walkway at George St	\$3,200,000
Additional costs for escalators/lifts	\$1,500,000
Entry/exit for RailCorp goods from basement	\$300,000
Additional staging/temp works, diversions	\$10,000,000
Total contribution towards Public Infrastructure	\$20,000,000

3. Further Contractual & Commercial Considerations

It is envisaged that TNSW and Thakral will continue to finalise the key commercial terms and Thakral will enter into a Project Delivery Agreement (PDA) with RailCorp. The PDA will contain such matters as:


- Conditions Precedent;
- Process for future Project Applications;
- Commercial Terms;
- Process for Design;
- Staging of Works;
- Interface plans for controls and safety;

- Commencement preconditions;
- Construction requirements;
- Existing tenancies;
- Security and safety arrangements;
- Re-subdivision and long term titles;
- Insurance;
- Certification;
- Guarantees and unconditional undertakings;
- RailCorp rights to "step in".

We trust the above-mentioned clearly outlines the current process and demonstrates the public benefit of the proposal. We are open to the nature of the final contractual arrangement to be adopted for the future agreements, however, the PDA nominated by TNSW/RailCorp would appear to be the most comprehensive way to do so. It is for this reason we have not pursued a Voluntary Planning Agreement as the PDA will in effect provide this with additional measures as required by TNSW.

Should you require any further information or wish to discuss further, please do not hesitate to contact the undersigned.

Yours sincerely
Thakral Holdings Limited



David Hogendijk
Senior Development Manager

Encl.

1. Deloitte Report dated 3 March 2011
2. WT assessment of public infrastructure works

cc: Mr Chris Wilson – Department of Planning.
Mr Warwick Proctor - TNSW

CITY ONE

Opinion of Possible Additional Costs associated with the Station Upgrade

a) Additional structural cost from basement to office level through the throughfare area - \$5,000,000.00 (excluding GST).

The design of the structure is restricted by the requirement to maintain the sightline and column free environment at the Hunter, Concourse and George Street Level. This results in heavier/larger columns at the lower levels with transfer structure introduced in the office level to account for this requirement.

b) Additional through site walkway at George Street Level - \$3,200,000.00 (excluding GST)

A large station entrance to George Street and Carrington Street with through site walkway for access to station area.

c) Additional cost for escalators/lift - \$1,500,000.00 (excluding GST)

There are total 8 escalators and one lift serving Hunter, Concourse, George Street and Carrington Street levels. Assumed cost shared 50/50 between Thakral/SRA.

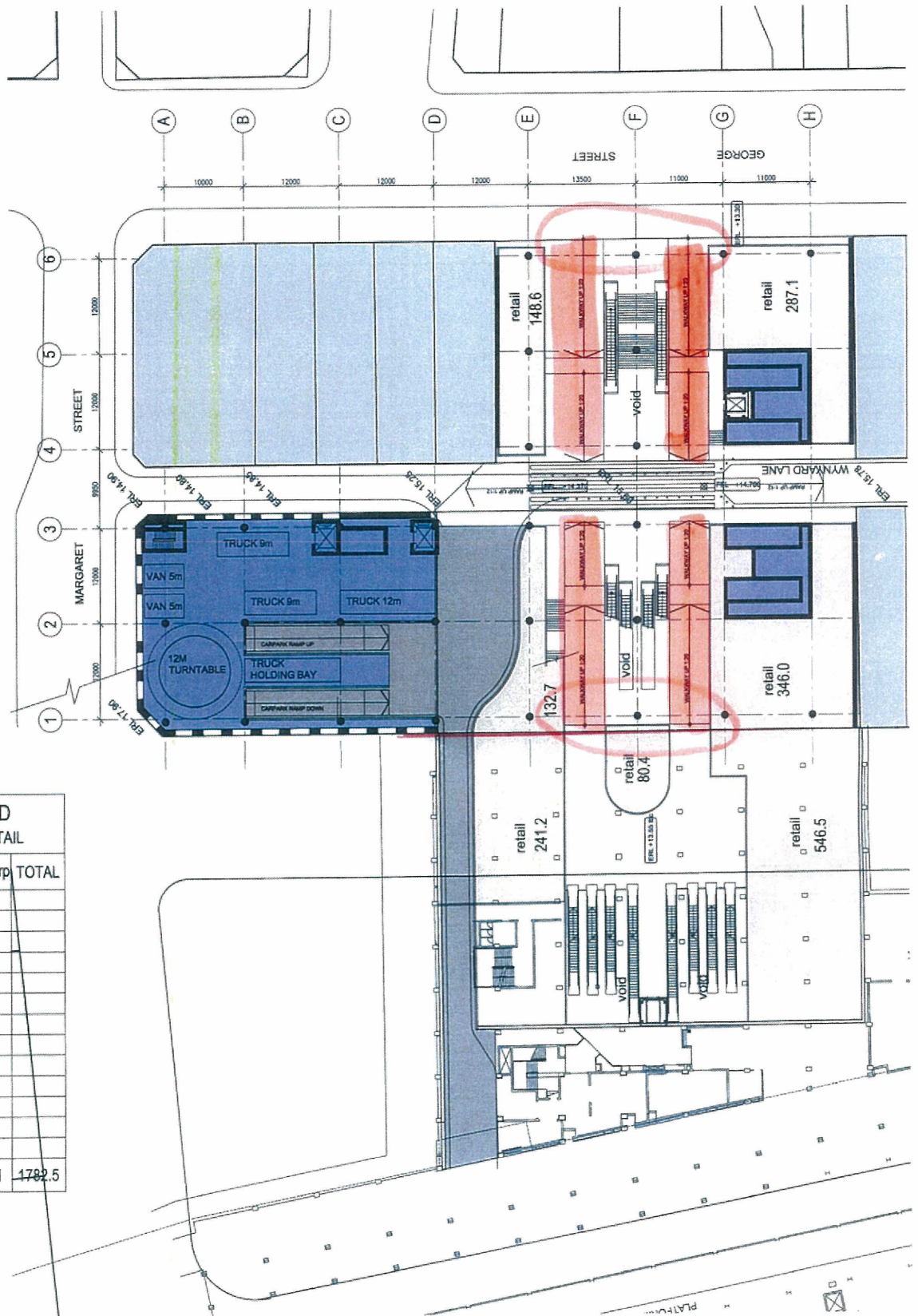
d) Entry/exit for SRA carpark - \$300,000.00 (excluding GST)

The design allows for an entry/exit from the existing SRA carpark.

e) Additional staging, temporary works, diversions, etc - \$10,000,000.00 (excluding GST)

In order to maintain full time access by the passengers from Hunter Connection and George Street and other site constraints, the following additional works/costs are envisaged/required:

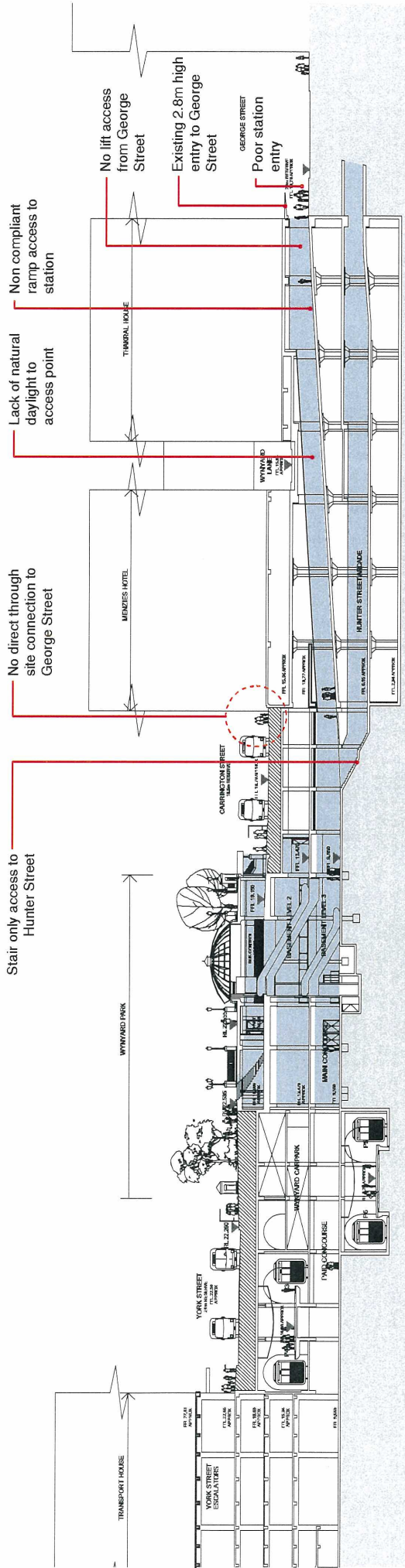
- i) Staging and out of hours work.
- ii) Temporary walkway, hoardings and services and removal of same.
- iii) Programming and time implication.



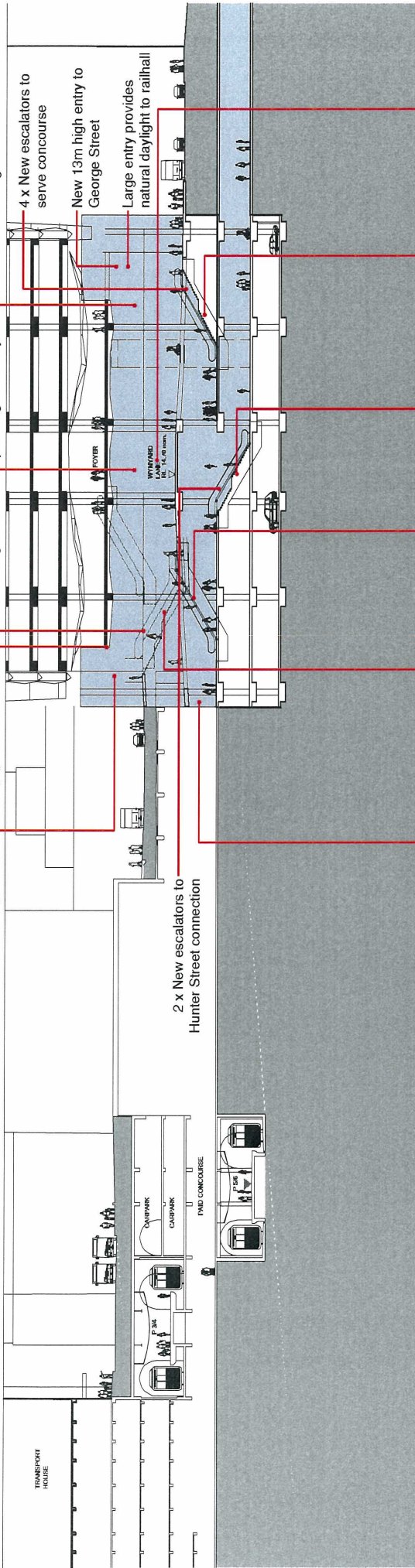
CITY ONE WYNARD GEORGE ST LEVEL GR1 RETAIL				
NAME	TOWER	SHELL HOUSE	RailCorp	TOTAL
RETAIL GR1-1	148.6			
RETAIL GR1-2	287.1			
RETAIL GR1-3	346.0			
RETAIL GR1-4	132.7			
RETAIL GR1-5				
RETAIL GR1-6				
RETAIL GR1-7				
RETAIL GR1-8				
RETAIL GR1-9			546.5	
RETAIL GR1-10			80.4	
RETAIL GR1-11			241.2	
RETAIL GR1-12				
RETAIL GR1-13				
	914.3		868.1	1782.5

DRAFT

GR1 GEORGE ST OPT 10 BASE BUILDING SCHEME



EXISTING



PROPOSED

Thakral Holdings Limited

Economic Appraisal Advice

3 March 2011

David Hogendijk
Senior Development Manager
Thakral Holdings Limited
Level 12, 301 George Street
Sydney NSW 2000

3 March 2011
Our Ref: 335850

Dear David

Re: Economic Appraisal Advice CityOne@Wynyard

Please find attached our draft report in relation to the CityOne@Wynyard project.

As requested, we have quantified a number of community benefits associated with the proposed development by Thakral. The methodology used is that developed and followed by RailCorp in appraising its capital projects.

We were unable to quantify a number of community benefits associated with the development by Thakral, but as more data becomes available, it may be possible to broaden the benefit estimation in future.

Please note that our analysis is based on reports undertaken by third parties for Thakral, and Deloitte has not verified the accuracy of the data used in this report.

Thank you for providing us with the opportunity to assist you and we look forward to continue to provide you with assistance in future.

Yours sincerely



Martin Oaten
Director

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1 Executive Summary

1.1 Background

Thakral is currently in the process of developing a submission to NSW Transport for the approval of the CityOne Concept Plan application. The CityOne Concept Plan is seeking to redevelop an area between George, Margaret and Carrington Streets in Sydney's CBD. The area is located immediately above Wynyard Station.

Specifically the proposed Concept Plan includes the following activities:

- Major redevelopment works to Wynyard Stations' public (unpaid) concourse areas
- Demolition of a number of properties owned by Thakral
- Conservation works to façade of Shell House on Carrington Street
- Construction of a new 29 level office tower
- Construction of new 5 level retail centre linking George to Carrington streets and Wynyard Station
- Construction of associated tenant basement parking
- Associated public domain improvements.

Central to the design development of the CityOne Concept Plan has been the need to assist with the upgrading of Wynyard Station and complementary to other State government initiatives including the now proposed construction of the City Relief Line, the construction of the Barangaroo Pedestrian Link and the implementation of critical initiatives in the Wynyard Precinct to improve bus flows during the peak.

The CityOne Concept Plan specifically aims to deliver the widest possible benefit to public transport users, the general public and wider business community by:

- Addressing the additional pedestrian demand associated with the Metropolitan Transport Plan (MTP) initiatives, including the construction of the new City Relief line, Barangaroo urban renewal project; and
- Increasing the pedestrian capacity of the Wynyard Station unpaid concourse areas between Carrington and George Streets.

Deloitte has identified and quantified the following economic benefits as part of this evaluation: improved access to station and reduction in crowding, improved station amenities, generated rail passengers from improved access and amenities and avoided environmental externalities and road congestion costs. Table 1.1 summarises the economic benefits in NPV terms.

Table 1.1: Total Quantified Benefits for CityOne, 2011 dollars ('000) (NPV at 7% real discount rate)

Quantifiable benefits	Value
Wynyard Access and crowding relief benefits	28,187
Amenity improvement benefits	19,686
Generated fare revenue	9,869
Avoided externalities from diverted road trips	766
Avoided congestion from diverted road trips	1,334
Total economic benefits	59,843

The CityOne project generates economic benefits to the community of approximately \$60 million in 2011 NPV terms, assuming a 30 year evaluation period from project completion.

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2 Introduction

Thakral is currently in the process of developing a submission to NSW Transport for the approval of the CityOne Concept Plan application. The CityOne Concept Plan is seeking to redevelop an area between George, Margaret and Carrington Streets in Sydney's CBD. The area is located immediately above Wynyard Station.

Specifically the proposed Concept Plan includes the following activities:

- Major redevelopment works to Wynyard Stations' public (unpaid) concourse areas
- Demolition of a number of properties owned by Thakral
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- Construction of a new 29 level office tower
- Construction of new 5 level retail centre linking George to Carrington streets and Wynyard Station
- Construction of associated tenant basement parking
- Associated public domain improvements.

The proposed development is seeking to deliver significant community benefits such as upgrades to Wynyard Station, an improvement in passenger capacity, safety and amenity and an improvement in pedestrian connections.

2.1 Background

Wynyard Station is the third busiest rail station in Sydney's CBD connecting with 8 major suburban rail lines. It currently handles approximately 24,000 passenger movements in the AM peak period and it is estimated 100,000 passengers use the station every weekday (RailCorp Conceptual Concourse Development at Wynyard Station, 2007).

Preliminary pedestrian and passenger modelling of existing conditions by Connell Wagner indicate the station suffers from extended periods of congestion in the AM and PM peak periods. Future growth scenarios of passenger movements at Wynyard Station estimate an increase of more than 100 percent from 23,800 in 2007 to 49,000 by 2031 for the AM peak period.

The CityOne Concept Plan is designed to service up to 60,000 persons in the AM peak hour (as opposed to current concourse which services up to 100,000 passengers per day).

A significant increase in passenger movements is required to accommodate up to 21,000 new workers and 2,475 residents once the new urban renewal project Barangaroo is fully developed. This new precinct is located in close proximity to the west of the proposed CityOne Project. The Transport and Access Working Group (TAWG), established by the Barangaroo Steering Committee, estimates that approximately 63 percent of daily journey to work trips to Barangaroo will be by train. This alone will lead to an increase of 20 percent of current passenger arrivals at Wynyard Station in the AM peak (4,560 passenger movements in a peak hour).

The CityOne Concept Plan can readily accommodate the proposed Barangaroo Pedestrian Link that is to be constructed by the State Government between Wynyard Station and Barangaroo South.

Other major growth pressures on passenger demand at Wynyard Station are driven by the Metropolitan Transport Plan (MTP). The MTP projects a growth in Sydney population from its current 4.1 million to 6 million by 2036. The MTP acknowledges and plans for major investment in rail and road capacity and the need to expand the State's public transport network in terms of capacity and quality.

Major transport schemes included in the MTP and that are likely to impact Wynyard Station are:

- Rail Western Express Services
- City Relief Line (new line from Eveleigh to Wynyard by 2018)
- South West Rail Link and the North West Rail Link (by 2018)
- Light rail extensions from Haymarket to Circular Quay and Lilyfield to Dulwich Hill
- 1000 additional buses by 2014 and continued roll-out of strategic bus corridors and bus priority measures.

In order to accommodate the growth in services, eight new platforms are proposed to be built at Wynyard Station each long enough to accommodate 12 car trains. This will lead to an additional capacity of 5,000 extra seats from Parramatta in the peak hour.

RailCorp developed a number of specific objectives for Wynyard Station on top of those identified in the MTP:

- Improve concourse ease of use and passenger access
- Create integrated management plan for Wynyard Station
- Meet fire and life safety standards for entire station
- Meet Disability Discrimination Act standards for all entrances.

A key objective of several key stakeholders is the transformation of Wynyard Station into an integrated public transport hub improving access to not only the actual Station but also other means of transport as identified above. This will lead to the development satisfying on number of objectives identified in the State Plan as well.

3 Benefit quantification

3.1 Introduction

Thakral is in the unique position to redevelop parts of Wynyard Station's public (unpaid) concourse due to its strategic landholdings in the stations precinct.

Deloitte was asked to identify, and where possible, quantify the community benefits associated with the proposed CityOne@Wynyard development by Thakral. The benefits identified are listed below.

3.2 Identified community benefits

Quantifiable Economic Benefits:

- Improved access to the station leads to reduced pedestrian access times as well as a crowding relief
- Improved customer amenity
- Generated demand through improved access time to the station and improved amenities
- Avoided environmental externality and road congestion costs from generated rail demand
- Capital cost completion benefits obtained earlier compared to an alternative developer or government development

Non-Quantifiable Economic Benefits:

- Integrated management plan Wynyard Station (reduced costs)
- Increased capacity to accommodate future increases in passenger movements
- Future projects that stand to gain from this investment: Barangaroo pedestrian tunnel
- Meet Fire and life safety standards and Disability Standards Act
- Uplift of surrounding property values (particularly Margaret Street)

In addition, the timing benefit of proceeding with the CityOne project now, compared to a delayed start date, has also been quantified. However, this effect has not been added to the other benefits as it is not a project specific benefit, rather it is a sensitivity test on the overall benefit quantification.

3.3 Quantifiable Benefits

3.3.1 Pedestrian access time and decongestion benefits

Wynyard station and its seven entrances experience significant congestion during the working week's morning and evening peak periods. It is estimated up to 40,000 enter and exit the station during its morning and evening peak (approximately 3.5 hours per working day in 2006). It is estimated the station caters for more than 100,000 passengers every weekday.

Current pedestrian congestion levels at Wynyard Station are a Level of Service (LOS) D or E and are projected to worsen over time. It is anticipated that the CityOne project can reverse this declining trend and improve the LOS to at least a Level C.

For the purpose of this study, the benefit generated by the improvements in passenger flow from the unpaid area leading up to the station (and vice versa) was calculated according to the method outlined below. The proposed new works of CityOne is expected to reduce the access time on average 20% when compared against the existing design as outlined in the Connell Wagner report. The report also indicates the new facilities will allow the currently congested station and surrounding areas LOS to increase from Level of Service D or E (major passenger flow restrictions) to at least Level of Service C (adequate passenger flow) as defined by RailCorp.

Thus, the generated benefit would be the reduction in access time towards the station through CityOne, and the improved Level of Service for the unpaid concourse area. These benefits will apply to passengers accessing Wynyard station during peak hour when the highest congestion occurs. The benefit calculations for this category are summarised in Table 3.1 and it is estimated that the measurable benefit for this category would be approximately \$2.5 million in 2015.

Table 3.1: Reduced Access Time and Decongestion Benefits

	Base Wynyard Station	Wynyard Station with CityOne
Peak Passengers per annum through Wynyard Station ('000) (2008/09)	24,321	24,321
Peak Passengers moving through CityOne ('000)	6,302	6,302
Access time from Station Gate to Unpaid Area (seconds)	60	48
Total Access Time Per Annum (Hours)	105,035	84,028
Value of Walking Time (\$ Per Hour) - Douglas Economics, 2008	44.97 (High Crowding)	28.27 (Medium Crowding)
Total Walking Time Costs (\$ '000)	4,723	2,375
Total Savings in Walking Time Costs per Annum (\$ '000)		2,348
Total – 2015 benefit after the completion of CityOne		2,517

Source: RailCorp, Connell Wagner Report and Deloitte Estimates

The reduction in walking time will translate in improvements in generalised journey time (GJT), which will lead to an increase in patronage for RailCorp.

The secondary benefits associated with generating additional passengers from reduced access time to Wynyard station are discussed in section 3.3.3.

3.3.2 Amenity benefits

The CityOne project proposes to significantly improve public amenity within the proposed development. The public concourse from George Street is proposed to be widened, leading into a new central atrium space lit naturally. The atrium will run from George to Carrington streets. At 20 meters high it will be larger in scale than the atrium in the Queen Victoria Building in Sydney. It will bring in daylight and natural ventilation to both ends of the public concourse area. With this proposed building upgrade come new escalators, lifts, signage, fire and life safety systems, lighting, toilets and many other amenities of benefits to the public.

The above improvements illustrate the significant improvements of the surroundings of the Wynyard station compared to the current premises. Amenity at and around CityRail stations can be quantified through the amenity rating assessment methodology based on work summarised in RailCorp's broader analysis of rail service attributes for train and stations. The rating values were taken from Douglas Economics' report prepared for RailCorp in December 2008. These covered 24 specific station attributes and are captured through two rating surveys of CityRail passengers which first assign ratings to each station and also allow for the calculation of the mathematical relationship between station ratings and onboard rail time.

Amenity ratings in subway/overbridge, station building, lifts/escalators, signing, information, lighting, cleanliness, graffiti, toilets, safety, car drop off, access to taxi, buses and bicycle, telephone and retail are expected to improve for Wynyard station as part of the CityOne project by Thakral. The improvements to Wynyard station are expected to lift station ratings to amongst the highest within the CityRail network. Table 3.2 shows the base rating for each attribute and the expected improvements, and associated benefits generated.

Table 3.2: Value of Improvements in Amenity Ratings for Wynyard Station and CityOne

Amenity	Range across RailCorp Network	Wynyard Base Rating	Expected Rating after CityOne	Onboard Train Time (minutes) of a 10% Rating Point Improvement	Amenity Improvement - Onboard Train Equivalent (minutes)	2008/09 Benefit Value (\$)
Subway	40% to 76%	54%	76%	0.01	0.022	36,911
Station Building	38% to 74%	59%	74%	0.10	0.150	251,665
Lifts/Escalators	11% to 80%	62%	80%	0.03	0.054	90,599
Signing	39% to 70%	65%	70%	0.05	0.025	41,944

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Information	27% to 69%	52%	69%	0.03	0.051	85,566
Lighting	43% to 76%	64%	76%	0.03	0.036	60,400
Cleanliness	48% to 82%	64%	82%	0.13	0.234	392,597
Graffiti	50% to 83%	63%	83%	0.05	0.100	167,776
Toilets	26% to 50%	39%	59%	0.01	0.020	33,555
Safety	42% to 67%	57%	67%	0.06	0.090	150,999
Car Drop off	21% to 63%	35%	63%	0.013	0.036	61,071
Taxi	28% to 70%	45%	70%	0.005	0.013	20,972
Bus	34% to 70%	54%	70%	0.024	0.038	64,426
Bicycle	18% to 61%	43%	61%	0.023	0.041	69,459
Telephone	20% to 64%	48%	64%	0.005	0.008	13,422
Retail	22% to 66%	54%	66%	0.049	0.059	98,653
Total					0.978	1,640,015
Total – 2015 benefit after the completion of CityOne					0.978	1,758,318

Source: RailCorp and Deloitte Estimates

These calculations have been based on the following parameters:

- All passengers accessing Wynyard station through the CityOne facilities will benefit from the amenity improvements. According to the RailCorp's 2008 Compendium of Rail Statistics and the Connell Wagner pedestrian modelling report, approximately 28,200 passengers will access Wynyard station through CityOne per average weekday.
- Assumes an annualisation factor of 300 to convert weekday passenger numbers to annual equivalent figures of approximately 8.5 million passengers per annum.
- On Board value of time of \$11.90 per hour (average) was applied. (Source: RailCorp)
- For the purposes of this evaluation, it is assumed that the base overall station rating of 60% for Wynyard, which is the benchmark for calculations of each of the station

attributes.

- A one percent per annum patronage growth rate was applied based on similar RailCorp station upgrade projects.

Improvements in generalised journey time (GJT) could be expected to lead to increases in patronage, depending on the GJT elasticity. RailCorp advises an overall GJT elasticity of -1.07, and this value was applied to average measures of GJT provided in Douglas Economics' report.

The increases in station amenity ratings will result in improvements in in-vehicle times for passengers of 0.978 minutes, which are then converted into a percentage change by using overall GJT elasticity. This figure, along with improvements in access time to the station, is applied to the total number of current passenger journeys to calculate the number of additional passengers. Additional generated demand is discussed in the next section.

3.3.3 Generated demand through improved access time and station amenities

The increases in access time and amenity ratings will result in improvements in in-vehicle times for passengers, which are then converted into a percentage change by using overall GJT elasticity. The following equation is used to calculate the generated demand:

$$GD = \left[\frac{GJT_{new} - GJT_{base}}{GJT_{base}} \right]^{\eta}$$

where:

GD	= generated demand;
GJT _{new}	= new generalised journey time after improvements;
GJT _{base}	= base generalised journey time;
η	= generalised journey time – elasticity of -1.07

This figure is applied to the total number of current passenger journeys to calculate the number of additional passengers. These additional passengers will generate additional fare revenue to RailCorp. The results of these calculations are shown in Table 3.3.

Table 3.3: Generated Demand and Incremental Fare Revenue

	Base	Access Time Reduction	Amenity Improvements
Generalised Journey time elasticity		-1.07	-1.07
Total Generalised Journey Time (mins):	59	58.80	58.02
- Average onboard train time	37	36.80	36.02
- Service Interval	16	16	16
- Transfer Penalty	6	6	6
Base Passengers (Peak and 24 Hours)		6.3m (Peak)	8.5m (Total Day)
% Increase in generated demand		1.45%	1.77%
Total No. of generated passengers (000)		91	150
Average single fare per journey		3.41	3.41
Incremental fare revenue (\$000) ¹ :			
2008 Notional Value		311	511
2014 Value after Completion of CityOne		334	548

Source: RailCorp and Deloitte Estimates

The average overall CityRail fare in 2009-10 would be \$3.41 per trip, which is a weighted average fare covering peak and off-peak for all distances. Based on the estimated number of increased rail passengers, the overall incremental fare revenue for RailCorp from the CityOne project is estimated at \$881,484 in 2015 when works for the project are assumed to be completed.

3.3.4 Avoided externalities and road decongestion benefits

The calculations of externality benefits can be divided into two categories: environmental benefits and avoided road congestion. Both of these externality benefits arise from generated rail demand, as passengers avoid bus and car travel leading to reduced environmental impact and lower road congestion.

Table 3.4 outlines the unit parameter values for environmental effects.

Table 3.4: Unit Environmental Parameters (cents/vehicle km)

	Car	Bus
Air pollution	1.87	30.12
Greenhouse gas emissions	2.58	15.67
Noise pollution	0.62	4.59
Accidents	5.09	7.95
Road damage	0.23	2.70
Total 2009/10 Values	10.38	61.04

Source: RailCorp – 2009-10 Parameters

The results of these calculations are shown in Tables 3.5. The 2014 figures in Table 3.6 assume an average annual 1% passenger growth rate from 2008 onwards.

Table 3.5: Environmental Externalities and Decongestion

Externalities	CityOne Project (Avoided Costs)
Increased Rail Passengers ('000) (2008)	241
Converted to:	
- Bus km ('000) (2008)	105
Environmental Benefits from diverted trips (\$'000) (20010):	
Bus trips	64
Road decongestion benefits from diverted trips (\$'000) (20010):	
Bus trips	111
Total Externalities Avoided (\$'000) (2008 Notional)	175
Total Externalities Avoided (\$'000) - 2015 Values	188

Notes: Assumes all generated rail passengers originally would have utilised buses; average bus occupancy of 60 passengers; average trip length of 26 kilometres
Source: RailCorp and Deloitte Estimates

3.3.5 Earlier completion compared against alternative developer or government development – timing benefit

There are some advantages to the community by the project commencing sooner rather than later. If the CityOne project does not proceed, the state government will need to seek alternative means to upgrade the Wynyard station building to achieve its broader strategic goals. This will involve either an alternative private developer or the state government to proceed with its own planning and construction process. Regardless of how the proposed upgrade moves forward without the CityOne project, there will be significant delays in delivery of an upgraded station building leading to delays of the realisation of community benefits.

Table 3.6 illustrates the difference in the total NPV of benefits with CityOne and a five year delay.

Table 3.6: NPV Timing Benefit

	Value
Total quantified benefits for CityOne (2011 NPV, \$m)	59.8
Total benefits if project was delayed by 5 years (2011 NPV, \$m)	44.8
Total reduction in NPV of benefits (2011 NPV, \$m)	15.0

Source: Deloitte Estimates

Based on the quantified benefits in this evaluation, a five year delay will equate to a loss of public benefits of approximately \$15.2m in 2011 NPV terms. This benefit is not added to the total quantified economic benefits as it represents an alternative scenario to the CityOne project, and should be treated as a separate benefit.

3.4 Non-Quantifiable Benefits

3.4.1 Integrated management plan Wynyard Station

A single, integrated management plan will reduce management costs and risks as the result of a reduction in the number of stakeholders, as a result of:

- Reduction in maintenance (single contract)
- Reduction in staff costs
- Reduction in operational costs (non-staff)

Besides obvious benefits flowing from a single, integrated management plan for the entire shopping centre/arcades connecting to the train station, there are other benefits such as single hours of operation, signage, lighting, security and maintenance contracts.

This benefit has not been quantified due to the lack of data on current staff, administration and operational costs.

3.4.2 Enhanced capacity to accommodate anticipated future increases in passenger movements

Rail patronage is expected to grow from approximately 24,000 entries in the peak period each work day in 2006 to approximately 60,000 entries by 2031 under the Metro West option, an increase of 250%.

Regardless of whether the Metro West infrastructure will proceed, it is clear that even given current increased patronage growth rates on the CityRail system, Wynyard Station would not be able to cope with anticipated future growth in demand. The growth in patronage can be attributed to the following:

- Increased number of train services utilising existing platforms
- Metro West project proceeding
- Non rail passenger growth of 19% between 2007 and 2031
- Barangaroo pedestrian tunnel proceeding as planned.

Benefits associated with rail users have been quantified in section 3.3. Due to the complexity of non-rail user movements through Wynyard and the uncertainty of other development, the non-rail passenger portion of this benefit has not been quantified at this stage.

3.4.3 Enabling infrastructure may benefit future projects at Wynyard

It is anticipated that future projects planned for Wynyard Station/Interchange may benefit from the CityOne Project. Examples include:

- Barangaroo pedestrian tunnel
- SW Rail link
- Metro West

As Barangaroo is the most advanced of planned investments at Wynyard Station, the cost avoidance cost are only estimated for the construction of the pedestrian tunnel to the new urban renewal project site. Due to the uncertainty of the location and evolving plans of the above developments, this benefit has not been quantified at this stage.

3.4.4 Fire and life safety benefits and Disability Standards Act

Wynyard Station was constructed in the 1920s to safety and fire standards very different from today's standards. One of the critical construction facts is that not all of the steel structure used to construct the station is fire resistant. In the event of a major fire, there would be significant weakening of this frame.

Repairs would require the closure of the station for a significant period and therefore lead to major disruption of rail network in Sydney with associated community losses.

The CityOne project proposes to provide funds towards these upgrade works – they would allow these fire protection works to be brought forward.

Should the above works be undertaken, it is estimated by Connell Wagner, in their report to Thakral, that station evacuation times will improve by 44 seconds as a result of widening the emergency stairs. This is a significant improvement and potentially lifesaving in case of emergencies.

Equally, the proposed building standards for the public (nonpaid) concourse will meet the

Disability Standards Act.

Due to the lack of available data relating to historical incidents and the impact of each of the incidents, these benefits have not been quantified.

3.4.5 Uplift of surrounding property values

Deloitte has estimated the CityOne project will positively affect the value of approximately 70 to 100 properties within two blocks immediately surrounding Wynyard station. Based on prior work, a Sydney CBD commercial building would have a market value of between \$60m and \$150m. Thus the total value of commercial properties around Wynyard station would lie in the range of \$4 billion and \$15 billion. An uplift in property value between 1% to 5% will generate additional property values anywhere between \$40 million to \$750 million.

Due to the uncertainty of the number of properties affected and the magnitude of increase in property value attributable to the CityOne project, this benefit has not been quantified in detail at this stage. However it should be noted significant gains in property values could be realised with the CityOne project.

3.5 Summary of Economic Benefits

Table 3.7 summarises the economic benefits in NPV terms at 7% real discount rate:

Table 3.7: Total Quantified Benefits for CityOne, 2011 NPV at 7% real discount rate

Quantifiable benefits	Value
Wynyard Access and Decrowding Benefits	28,187
Amenity Improvement Benefits	19,686
Generated Fare Revenue	9,869
Avoided Externalities from Diverted Road Trips	766
Avoided Congestion from Diverted Road Trips	1,334
Total Economic Benefits	59,843

The CityOne project generates economic benefits to the community of approximately \$60 million in 2011 NPV terms, assuming a 30 year evaluation period from project completion.

In the case where the CityOne project does not proceed and the project was to be delayed by five years, the loss of economic benefits to the community is estimated to be \$15.2m in NPV terms.

The non-quantifiable benefits also present the opportunity for future cost savings to the community, as well as significant improvements in safety standards and an uplift in property values. These benefits can be investigated further once relevant data becomes available.

4 Limitation of our work

Statement of Responsibility

This report was prepared for the Thakral Holdings Group for the purpose of providing economic appraisal advice in relation to the CityOne@Wynyard project.

In preparing this Report we have relied on the accuracy and completeness of the information provided to us by Thakral Holdings Group and from publicly available sources. We have not audited or otherwise verified the accuracy or completeness of the information. We have not contemplated the requirements or circumstances of anyone other than Thakral Holdings Group.

The information contained in this Report is general in nature and is not intended to be applied to anyone's particular circumstances. This Report may not be sufficient or appropriate for your purposes. It may not address or reflect matters in which you may be interested or which may be material to you.

Events may have occurred since we prepared this Report which may impact on it and its conclusions.

No one else, apart from Thakral Holdings Group is entitled to rely on this Report for any purpose. We do not accept or assume any responsibility to anyone other than Thakral Holdings Group in respect of our work or this Report.

Appendix A

Appendix A.1 Total Quantified Benefits from 2011 to 2044:

Year	Improved Amenities	Reduced Access Time and Crowding	Generated Revenue	Externalities	Total Benefits
2011	\$ -	\$ -	\$ -	\$ -	\$ -
2012	\$ -	\$ -	\$ -	\$ -	\$ -
2013	\$ -	\$ -	\$ -	\$ -	\$ -
2014	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,758,318	\$ 2,517,611	\$ 881,484	\$ 187,622	\$ 5,345,035
2016	\$ 1,775,901	\$ 2,542,787	\$ 890,299	\$ 189,498	\$ 5,398,485
2017	\$ 1,793,660	\$ 2,568,215	\$ 899,202	\$ 191,393	\$ 5,452,470
2018	\$ 1,811,597	\$ 2,593,897	\$ 908,194	\$ 193,307	\$ 5,506,995
2019	\$ 1,829,713	\$ 2,619,836	\$ 917,276	\$ 195,240	\$ 5,562,065
2020	\$ 1,848,010	\$ 2,646,034	\$ 926,449	\$ 197,193	\$ 5,617,686
2021	\$ 1,866,490	\$ 2,672,494	\$ 935,714	\$ 199,164	\$ 5,673,862
2022	\$ 1,885,155	\$ 2,699,219	\$ 945,071	\$ 201,156	\$ 5,730,601
2023	\$ 1,904,006	\$ 2,726,212	\$ 954,521	\$ 203,168	\$ 5,787,907
2024	\$ 1,923,046	\$ 2,753,474	\$ 964,067	\$ 205,199	\$ 5,845,786
2025	\$ 1,942,277	\$ 2,781,008	\$ 973,707	\$ 207,251	\$ 5,904,244
2026	\$ 1,961,700	\$ 2,808,819	\$ 983,444	\$ 209,324	\$ 5,963,286
2027	\$ 1,981,317	\$ 2,836,907	\$ 993,279	\$ 211,417	\$ 6,022,919
2028	\$ 2,001,130	\$ 2,865,276	\$ 1,003,212	\$ 213,531	\$ 6,083,148
2029	\$ 2,021,141	\$ 2,893,929	\$ 1,013,244	\$ 215,667	\$ 6,143,980
2030	\$ 2,041,353	\$ 2,922,868	\$ 1,023,376	\$ 217,823	\$ 6,205,420
2031	\$ 2,061,766	\$ 2,952,096	\$ 1,033,610	\$ 220,001	\$ 6,267,474
2032	\$ 2,082,384	\$ 2,981,617	\$ 1,043,946	\$ 222,201	\$ 6,330,149
2033	\$ 2,103,208	\$ 3,011,434	\$ 1,054,385	\$ 224,423	\$ 6,393,450
2034	\$ 2,124,240	\$ 3,041,548	\$ 1,064,929	\$ 226,668	\$ 6,457,385
2035	\$ 2,145,482	\$ 3,071,963	\$ 1,075,579	\$ 228,934	\$ 6,521,958
2036	\$ 2,166,937	\$ 3,102,683	\$ 1,086,334	\$ 231,224	\$ 6,587,178
2037	\$ 2,188,606	\$ 3,133,710	\$ 1,097,198	\$ 233,536	\$ 6,653,050
2038	\$ 2,210,492	\$ 3,165,047	\$ 1,108,170	\$ 235,871	\$ 6,719,580
2039	\$ 2,232,597	\$ 3,196,697	\$ 1,119,251	\$ 238,230	\$ 6,786,776
2040	\$ 2,254,923	\$ 3,228,664	\$ 1,130,444	\$ 240,612	\$ 6,854,644
2041	\$ 2,277,472	\$ 3,260,951	\$ 1,141,748	\$ 243,018	\$ 6,923,190
2042	\$ 2,300,247	\$ 3,293,561	\$ 1,153,166	\$ 245,449	\$ 6,992,422
2043	\$ 2,323,250	\$ 3,326,496	\$ 1,164,697	\$ 247,903	\$ 7,062,346
2044	\$ 2,346,482	\$ 3,359,761	\$ 1,176,344	\$ 250,382	\$ 7,132,970
Total	\$ 61,162,900	\$ 87,574,814	\$ 30,662,342	\$ 6,526,408	\$ 185,926,463
NPV @ 7%	\$ 19,686,178	\$ 28,187,240	\$ 9,869,125	\$ 2,100,620	\$ 59,843,164

