Out of Scope

617 DEVELOPMENT OF THE FAST TRACK PUBLIC TRANSPORT NETWORK (Patrick Conlon) - NOTED

Out of Scope

MINUTES forming ENCLOSURE to: **MTR 07/008 PN**

TO: THE PREMIER FOR CABINET TO NOTE

RE: DEVELOPMENT OF THE FAST TRACK PUBLIC TRANSPORT NETWORK

1. PROPOSAL

1.1. That Cabinet notes the development of the 'Fast Track Network' public transport strategy to meet South Australia's Strategic Plan Target 3.6 (SASP T3.6); and that funding for the Fast Track Network strategy is being sought through the 2007-08 Budget process.

2. BACKGROUND

2.1. The Government has set the target of increasing the use of public transport to 10% of metropolitan weekday passenger vehicle kilometres by 2018 (SASP T3.6). The target was re-affirmed during South Australia's Strategic Plan community engagement process, and through ongoing feedback from the public.

2.2. Current public transport patronage is estimated to be at 6.9% of passenger vehicle kilometres. Patronage has grown by 11% since 2001. The growth has been due to a combination of incremental and well-targeted improvements to services, improved marketing, and petrol price rises. There is now pressure on capacity, with overcrowding on buses and trains in the peak periods. Additional funding for peak period services (averaging $2.9m p.a.) allocated in the 2006-07 budget will relieve the pressure for a short time.

2.3. The impact of long-term under-investment in rail infrastructure is becoming increasingly evident in the operations of the metropolitan passenger train services. Hundreds of track defects are being recorded each year. The most serious category, track failures, that must be reported to the Rail Safety Regulator (e.g. broken rails, track buckles, spread track) increased from 40 p.a. in 2000 to 120 p.a. in 2005. To maintain safety on the system, speed restrictions are applied so that train services are increasingly taking longer than timetabled.

2.4. Other State Governments have recognised the need to substantially increase investment in public transport services to meet the travel needs of growing urban populations, address urban congestion and safety issues, and counter increasing public criticism of service quality. The NSW Government has announced an $8 billion ten-year investment in Sydney rail, and an additional 400 buses. The Victorian Government is investing $6.5 billion over ten years in Melbourne's public transport, and Queensland is investing $2 billion in public transport infrastructure. The West Australian Government will complete its third major phase of investment in passenger rail when the $1.6 billion southern rail line and city loop are completed in 2007.

3. DISCUSSION

3.1. A thorough review of the public transport system has been undertaken by a Department for Transport, Energy and Infrastructure Task Force (2005-06) to determine a cost-effective strategy to meet the SASP target. The limitations of the existing system were assessed and fundamental options were assessed and costed. The investment required to maintain current services and to upgrade the system was analysed. Lessons learnt from the recent patronage growth in Adelaide and from successful public transport improvements in comparable cities have been applied in developing new strategies.

3.2. Four options have been analysed to determine forecast patronage, benefits and costs.

Option 1: Business as Usual – continue with current levels of capital and operating expenditure on public transport. With this option the system would continue to deteriorate and the recent patronage growth would be reversed.

Option 2: Sustain the System – invest sufficient funds to maintain the current system. This option would retain the existing timetabled level of service at a cost of approximately $612m (indexed dollars) in capital works over the next 11 years, but would not expand patronage towards the target.

Option 3: Extend Existing Services – nearly double the frequency of services on the existing route network. This option, aimed at meeting the target, would require a major expansion in the bus, train and tram fleets, and would incur high ongoing operating costs while achieving a public transport patronage share by 2018 of just 8.4%. The infrastructure cost of this option from 2007 to 2018 is estimated at $1.7 billion, with an additional net operating cost by 2018 of $160m p.a. (indexed dollars).

Option 4: Develop the Fast Track Network - DTEI's Task Force found that cities comparable to Adelaide that have successful modern public transport systems have invested in core corridor networks that move large numbers of people on frequent services at higher speeds. Customers place greatest value on frequency of services, then reliability, speed, connectivity and safety. The Fast Track Network is a strategy designed to meet the **SASP** target by providing more frequent and faster services on a higher order network comprising the existing dedicated public transport corridors (rail, tram, O-Bahn) plus bus priority routes. This is supported by direct local bus feeder services, greater connectivity facilitated by improved interchanges, improved accessibility through transit oriented development, and improved amenity and security. The Fast Track Network strategy is described in more detail in Appendix A.

The conservative patronage forecast for Option 4 is of growth in the proportion of passenger kilometres by public transport from the current 6.9% to 9.5% by 2018. In an alternative scenario that has a 30% increase in vehicle operating costs above inflation due to oil price rises, the 2018 patronage share forecast for Option 4 is 13.9%.

The infrastructure cost from 2007 to 2018 is estimated at $1.65 billion (indexed dollars), with an additional net operating cost by 2018 of $80m p.a. (indexed dollars).

The re-structuring of the system, as outlined in Option 4, delivers the highest patronage gains with the least increase in operating costs, and the highest benefit-cost ratio compared with Options 2 and 3. There is potential, through more detailed network design, to further improve the Fast Track Network concept to achieve higher patronage and greater operating cost efficiencies.

3.3. Five bi-lateral budget bids have been submitted for the commencement of the implementation of the Fast Track Network. The investing costs are summarised in the following table. The budget impact for the Forward Estimates period and beyond is summarised in Appendix C.

Budget Bid	Fast Track Network Packages	Investing ($millions, indexed)	
		Forward Estimates	Beyond Forward Estimates
		2007-08 - 2010-11	2011-12 - 2017-18
	Package 1		
1	Glenelg Tramline Re-railing	4	-
2	Rail Risk Reduction*	31	-
3	Rail Revitalisation*	196	39
4	Smart Card Fare Collection System	30	-
5	**Packages 2 to 6:**		
	2. Fast Track Rail Network **	110	749
	3. O-Bahn Revitalisation	39	19
	4. Fast Track Bus Network	68	360
	5. System-wide Measures	5	-
	6. Transit Oriented Development	Private sector lead	
	TOTAL	483	1,167

* TransAdelaide investment for rail infrastructure components.
**Includes upgraded bus feeder services in Outer North and Outer South, and station and interchange upgrades. The rail electrification component (infrastructure and rolling stock) is $588m by 2015.

The first four bids relate to the essential works required before a Fast Track Network of more frequent, faster, more reliable and better connected services can be provided.

3.4. While the Fast Track is specifically designed to deliver on SASP Target 3.6, it provides a significant impetus towards the achievement of other targets. The contribution of an improved public transport system to the achievement of SASP objectives and targets is described in Appendix B.

3.5. If the Government proceeds with the strategy, it is proposed to undertake a public engagement process specifically to determine public support and feedback on the proposed Fast Track Network.

3.6. To deliver the Fast Track Network strategy, it may be necessary to amend governance arrangements for TransAdelaide to overcome the accounting anomaly by which capital grants to TransAdelaide appear as operating expenditure in the Government's accounts.

3.7. The benefits of the Government's investment in the Fast Track public transport system would be as follows.

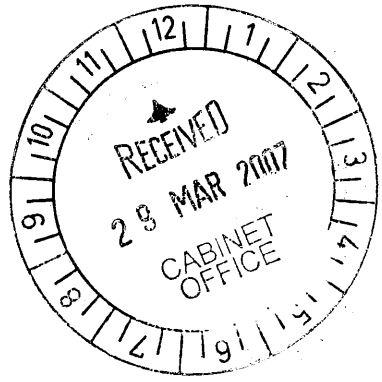
- Patronage growth to achieve the SASP target;
- Significant improvements in the frequency and speed of train and O-Bahn services, and bus services on a defined on-road Fast Track Network;
- More feeder services into the major metropolitan activity centres (e.g. Modbury, Marion, Elizabeth, Noarlunga, Port Adelaide) and more frequent bus services between them;
- Improved connectivity of services and more convenient transfers;
- Improved safety and amenity on public transport, and at interchanges, stations and stops across the network;
- Minimisation of future safety risk on the rail system as the track is upgraded;
- Lower energy consumption and reduced maintenance costs on the rail system as a result of the electrification of the rail system;
- Reduced greenhouse emissions from buses and trains, and less noise from trains due to electrification and use of low emission fuels;

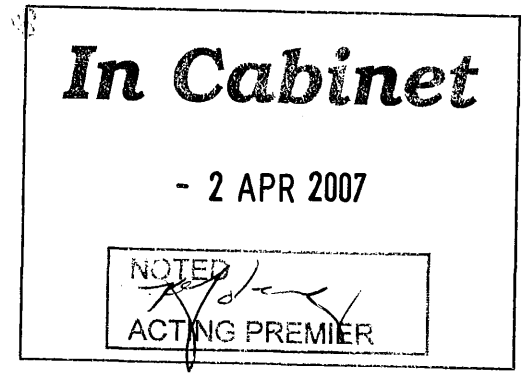
- Facilitation of urban renewal and sustainable development within the urban boundary with the development of new urban communities in transit oriented developments;
- **R**educed congestion on the road network, delaying the need for expensive road capacity increases;
- Accelerated improvements in public perceptions of the public transport system leading to increased use;
- A more understandable and user-friendly public transport system, and better intelligence on the operations and performance of the system.

4. RECOMMENDATIONS

4.1. That **C**abinet notes the development of the 'Fast Track **N**etwork' public transport strategy to meet **S**outh Australia's **S**trategic **P**lan Target 3.6; and that funding for the Fast Track **N**etwork strategy is being sought through the 2007-**0**8 Budget process.

HON PATRICK CONLON MP
MINISTER FOR TRANSPORT
20 March 2007





APPENDIX C: SUMMARY OF FAST TRACK NETWORK BILATERAL BIDS
BUDGET IMPACTS (DTEI)

	FORWARD ESTIMATES				BEYOND FORWARD ESTIMATES							
FAST TRACK INITIATIVES	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	TOTAL PROJECT COST
	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's	$ 000's
Glenelg Tramline Re-railing												
Depreciation		-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	
Net Operating Impact	0	-126	-126	-126	-126	-126	-126	-126	-126	-126	-126	
Capital Investment - DTEI	-3,770											-3,770
Net Lending Impact	-3,770	0	0	0	0	0	0	0	0	0	0	
Rail Risk Reduction												
Operating Expenditure	-256	-143	-354									
Capital Investment - TRANSADELAIDE	-9,994	-10,369	-10,410									-30,773
Net Operating Impact	-10,250	-10,512	-10,764	0	0	0	0	0	0	0	0	
Net Lending Impact	-10,250	-10,512	-10,764	0	0	0	0	0	0	0	0	
Rail Revitaiisation												
Operating Expenditure			-5,964	-6,113	-3,130							
Capital Investment - TRANSADELAIDE	-4,422	-36,263	-76,662	-78,578	-39,050							-234,975
Net Operating Impact	-4,422	-36,263	-82,626	-84,691	-42,180	0	0	0	0	0	0	
Net Lending Impact	-4,422	-36,263	-82,626	-84,691	-42,180	0	0	0	0	0	0	
Smart Card Replacement Fare Collection System												
Depreciation				-2,160	-2,160	-2,160	-2,160	-2,160	-2,160	-2,160	-2,160	
Net Operating Impact	0	0	0	-2,160	-2,160	-2,160	-2,160	-2,160	-2,160	-2,160	-2,160	
Capital Investment - DTEI	-400	-11,800	-18,200									-30,400
Net Lending Impact	-400	-11,800	-18,200	0	0	0	0	0	0	0	0	
Development of Fast Track Public Transport Network												
Operating Revenue	3,400	4,949	6,590	9,425	19,999	22,483	26,182	40,120	44,427	48,963	50,481	
Operating Expenditure	-4,305	-6,574	-12,407	-22,373	-42,809	-59,665	-74,514	-91,881	-104,580	-127,384	-130,558	
Capital Investment - TRANSADELAIDE	-5,100	0	-21,500	-62,900	-31,700	-58,000	-105,800	-138,900	-25,000	-25,600	-19,600	-494,100
Net Operating Impact	-6,005	-1,625	-27,316	-75,848	-54,510	-95,182	-154,132	-190,661	-85,153	-104,021	-99,677	
Capital Investment - DTEI	-5,950	-37,900	-53,750	-35,200	-110,500	-112,900	-109,800	-73,500	-138,500	-95,800	-82,100	-855,900
Net Lending Impact	-11,955	-39,525	-81,066	-111,048	-165,010	-208,082	-263,932	-264,161	-223,653	-199,821	-181,777	
Note: CAPITAL INVESTMENT (DTEI AND TRANSADELAIDE)	*-11,050*	*-37,900*	*-75,250*	*-98,100*	*-142,200*	*-170,900*	*-215,600*	*-212,400*	*-163,500*	*-121,400*	*-101,700*	*-1,350,000*
TOTAL - FAST TRACK INITIATIVES												
Operating Revenue	3,400	4,949	6,590	9,425	19,999	22,483	26,182	40,120	44,427	48,963	50,481	
Operating Expenditure	-4,561	-6,717	-18,725	-28,486	-45,939	-59,665	-74,514	-91,881	-104,580	-127,384	-130,558	
Depreciation	0	-126	-126	-2,286	-2,286	-2,286	-2,286	-2,286	-2,286	-2,286	-2,286	
Capital Investment - TRANSADELAIDE	-19,516	-46,632	-108,572	-141,478	-70,750	-58,000	-105,800	-138,900	-25,000	-25,600	-19,600	-759,848
Net Operating Impact	-20,677	-48,526	-120,832	-162,825	-98,976	-97,468	-156,418	-192,947	-87,439	-106,307	-101,963	
Capital Investment - DTEI	-10,120	-49,700	-71,950	-35,200	-110,500	-112,900	-109,800	-73,500	-138,500	-95,800	-82,100	-890,070
Net Lending Impact	-30,797	-98,100	-192,656	-195,739	-207,190	-208,082	-263,932	-264,161	-223,653	-199,821	-181,777	
Note: CAPITAL INVESTMENT (DTEI AND TRANSADELAIDE)	*-29,636*	*-96,332*	*-180,522*	*-176,678*	*-181,250*	*-170,900*	*-215,600*	*-212,400*	*-163,500*	*-121,400*	*-101,700*	*-1,649,918*

CONTRIBUTION OF IMPROVED PUBLIC TRANSPORT TO SOUTH AUSTRALIA'S STRATEGIC PLAN OBJECTIVES AND TARGETS

T1.21: Strategic Infrastructure	While the SA Government's investment in health and education leads the nation, its per capita investment in urban public transport achieves only 5th ranking (and is only half that of NSW)*. Fast Track involves investment in strategic public transport infrastructure with the economic benefits of providing better access to education and jobs, and reducing congestion and the need for further costly road expansions.
T1.22: Total Population	To meet the population target sustainably, good public transport will be needed to underpin less car dependent growth within the urban boundary.
T2.2: Healthy Weight	Public transport is a more active mode than car travel. In combination with transit-oriented development it will encourage more walking and cycling in daily travel, particularly for children, potentially reducing obesity.
T2.9: Road Safety	Public transport is the safest mode of travel. The BCA shows $100m in reduced accident benefits.
T3.5: Greenhouse Gas Reductions	The Fast Track strategy, as currently configured, delivers modest reductions in greenhouse gas emissions (refer section 3.3.6).
T3.7: Ecological Footprint	In combination with transit-oriented development, an improved public transport system can reduce resource consumption with respect to car ownership, travel emissions, buildings and land.
Building Communities	Public transport is supportive of community building with respect to strengthening social capital and the regeneration of run-down areas.
Expanding Opportunity	Public transport is important in maintaining affordable mobility for lower income earners, young and elderly people in the face of rising fuel costs. The Fast Track Network provides improved accessibility in particular for outer suburban residents who are particularly vulnerable to oil price and mortgage interest rises.

* Evatt Foundation, 2006, "The State of the States 2006".

PREFERRED OPTION 4 – THE FAST TRACK NETWORK

DESCRIPTION OF PACKAGES

1. Risk Reduction/Rail Revitalisation

Risk Reduction includes installing concrete sleepers on part of the Belair line and upgrading the condition of the associated infrastructure assets (i.e. formation, drainage, ballast) to increase track stability, converting ageing open deck bridges (where rail lines cross over waterways and culverts) to closed deck and replacing turnouts and switching equipment, and upgrading to concrete bearers in locations with high frequency usage and where assets are approaching the end of their effective lives. These improvements will address safety and reliability issues.

Rail Revitalisation involves rail infrastructure upgrading work on the north-south rail corridor (the "Rail Spine") between Noarlunga **C**entre and Gawler **C**entral. The main components are rail track upgrading including concrete re-sleepering and bi-directional signalling – allowing two-way train travel on each track thereby increasing flexibility, reliability and continuity of services and enhancing incident recovery, and rail turnouts.

2. Fast Track Rail Network

The Fast Track Network includes electrification of the rail system. An analysis has been undertaken of the options of upgrading the existing diesel system or switching to an electric system to deliver the improved Fast Track level of service (the other Australian urban rail systems are electric). At Fast Track service levels, an electric train service offers lower energy costs, lower maintenance costs, cheaper railcars, improved air quality and less noise, further travel time reductions, and better amenity (a prerequisite for transit oriented development).

Electrification of the Gawler, Noarlunga, Tonsley, Outer Harbor and Grange metropolitan rail lines; duplication of the Tonsley track and extension of the line to the Sturt/Flinders Triangle; construction of a new bus-train interchange at Flinders/Bedford **P**ark, the redevelopment of key stations as bus-train interchanges, and the upgrading of other key stations; development of additional park 'n' ride spaces at key stations/interchanges; replacement of 2000 class railcars, conversion and upgrading of existing 3000 class railcars to electric and purchase of additional electric railcars; purchase of additional buses to support more frequent feeder services to stations and interchanges on the rail network, and the ongoing provision of a fast, frequent "Go Zone" level of service on the rail network.

3. O-Bahn Revitalisation

Pre-validated boarding at O-Bahn interchanges and in Grenfell/**C**urrie Streets; bus priority from the O-Bahn to the city centre and purchase of additional buses to provide faster, more frequent services along the O-Bahn and feeding into the O-Bahn, and the development of Klemzig as a bus interchange.

4. Fast Track Bus Network

The provision of bus priority measures along the "Go Zones" that form part of a defined on-road Fast Track Network where peak hour delays to buses on arterial roads are most severe; and the purchase of additional buses to provide fast, more frequent services both feeding into the Fast Track Network and also along the Network.

Specific investments include -

- Implementation of a reversible bus lane in the Bakewell Underpass
- Intersection improvements to provide bus priority.
- Other bus priority measures, such as GPS tracking and increasing green time for late running buses at traffic signals.

- Purchase of additional buses.
- Provision of additional bus services, including high speed, high frequency services along the Fast Track Network.
- New/upgraded bus interchanges and additional park and ride including Mt Barker, Verdun, Aldgate, Crafers, Old Reynella and other key locations on the Fast Track Bus Network.

5. System-wide Measures

Replacement of the fare collection system, provision of timetable and route information and publicity associated with service changes, as well as targeted marketing and behaviour change programs; and better intelligence to maximise patronage gains resulting from improved services.

6. Transit Oriented Development (TOD)

Facilitation of development around key stations and interchanges to provide more people with convenient access to the improved public transport network in partnership with the private sector.