SEQ 2001 Regional Planning Exercise Including Transport Planning Aspects

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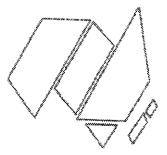
Abstract:

The Queensland Government has embarked on a major program of Regionalisation This entails a very ambitious Regional Planning Process, which involves not only Commonwealth, State and Local Governments but also Business Unions and Professional Sectors along with Welfare and Environmental Groups. The object is to integrate all facets into the Regional Planning Process and make planning more relevant to Regional circumstances and to reform the Land Use Planning System to achieve more efficiency and responsiveness This paper outlines features of the Regional Planning Process and then discusses the Transport Planning Aspects of the Process including the production of Position and Policy Papers and the evaluation of various Land Use Patterns relative to their impacts on public and private transport

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1. INTRODUCTION

The Queensland Government has a major commitment to Regional Planning. Impetus was given to this commitment by the Public Sector Management Commission's review and the appointment of the Department of Housing, Local Government and Planning as lead agency for planning in the State.

The primary purpose of regionalisation is to ensure that Government services are more readily available to people throughout the State and to eliminate a concentrated (Brisbane, George Street) centralised focus for Government. The Department of Housing, Local Government and Planning's proposed regions are shown in Figure 1. The two areas where major regional planning exercises are under way are South East Queensland (SEQ) and the Cairns - Mulgrave region in Far North Queensland - both being areas currently experiencing high population growths.

This paper outlines features of the Regional Planning Process for SEQ 2001 and then discusses the Transport Planning Aspects of the Process including the production of Position and Policy Papers and the evaluation of various Land Use Patterns relative to their impacts on public and private transport.

The objectives of the regional planning exercise were:-

- to integrate State, Regional and Local Planning;
- to introduce a more participative process, which besides all levels of Government, included business, industry, unions, professional, environmental and welfare groups within the community;
- to establish a process that was more responsive to economic, social and environmental issues and which would be more relevant to local and regional circumstances, especially in the area of growth management.

The approach represents an extremely bold and broad integrated planning exercise, which requires recognition of all current issues and problems; the specification of an improved situation to a 15 to 18 years target year horizon; and the derivation of policies and strategies to help achieve this preferred situation. Clearly all sectors could not be satisfied, as practical budget constraints would necessarily impose the need for priorities on projects to be set by Government, taking all sector aspirations into consideration.

It is significant to note that the SEQ Region presents 1.3% of area but contains 65% of the State's population. Present projections indicate that the region's share of the State population is likely to increase as shown on Table 1.

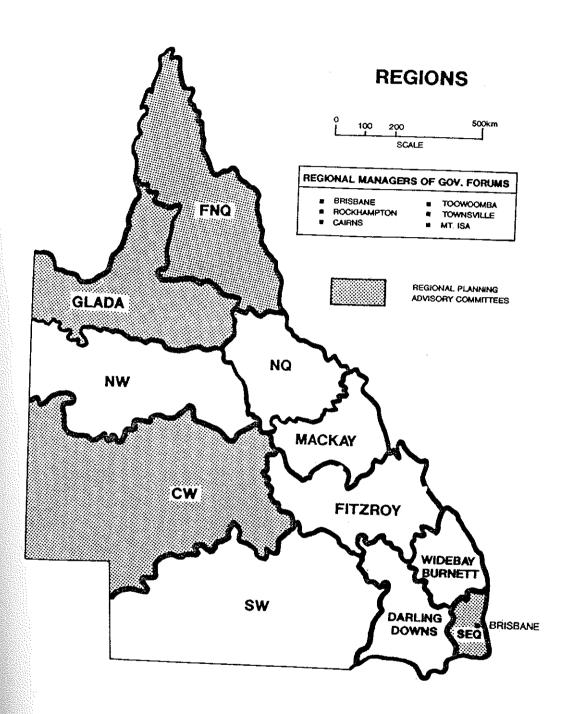


FIGURE 1

Table 1

SEQ 2001 BASIC STATISTICS

	SEQ REGION	QUEENSLAND
AREA	22,478 sq km (1.3%)	1,727,000 sq km
POPULATION 1991	1,937,754 (65%)	2,966,100
POPULATION 2011	3,050,000 (67%)	4,522,000

Figure 2 shows the 20 Local Authorities within the South East Queensland Region.

At the invitation of the Premier and Deputy Premier a large meeting of all stakeholders was held in December 1990, to review the development situation within the region. The resolutions from this conference were as follows:

- It was recognised that unilateral decisions had been made in the past and that the continuation of such a process could lead to a chaotic mess.
- Issues of concern amongst participants were:
 - high population growth in scattered developments;
 - the changing role of the region within the state;
 - a rising expectation of improved environmental management;
 - the recognition of the need to structure urban development growth for the more efficient delivery of services and infrastructure;
 - the need to develop a framework and process for managing growth in a collective partnership of Government with Local Authorities and community groups.

There was escalating public concern that the predicted growth posed significant risks to the overall quality of life within SEQ and that more effective management was required if the economic, social, environmental and cultural attractors for the region were not to be compromised.

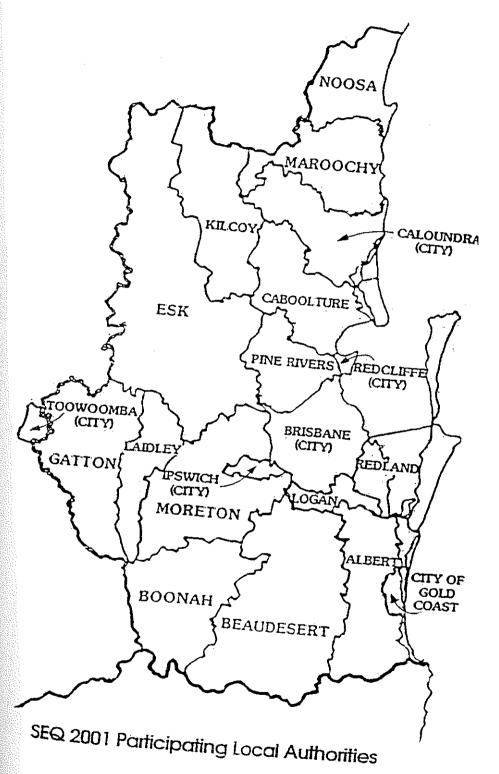


FIGURE 2

2. PURPOSE

The purpose of the SEQ 2001 regional planning exercise was to develop strategies to manage future for State Agencies, Local authorities, the community and interest groups. State Cabinet decided to establish a Regional Planning Advisory Group (RPAG) and set this group two "Performance Criteria" namely:

- Policies for Growth Management
- Provision for ongoing growth

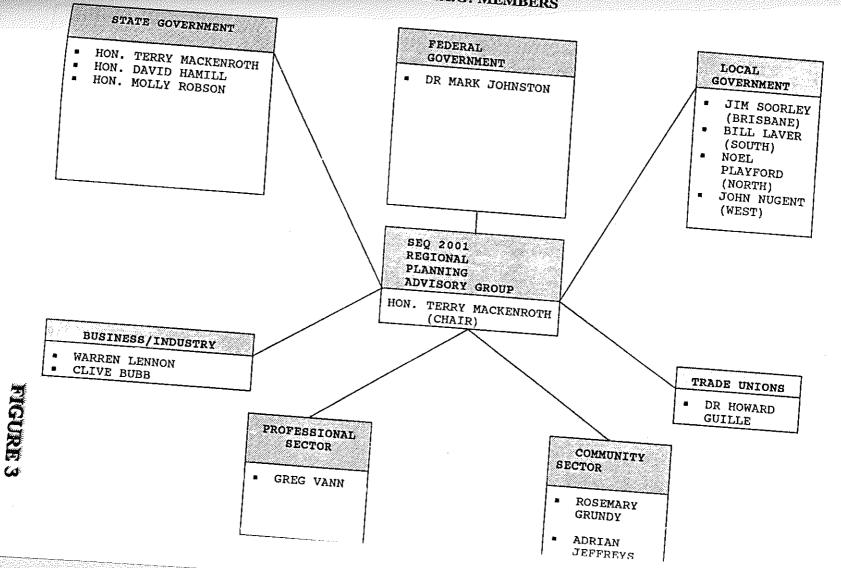
The composition of RPAG is shown in Figure 3. Besides Federal, State and Local Governments, representatives were called from the Trade Unions, Community and Environmental Sectors, the Professional Sector and Business and Industry.

RPAG was to develop policies, strategies and plans for managing growth within the SEQ region. This RPAG was to prepare policy advice for Governments based on all available information along with on-going consultations with all sectors. Immediate, controversial, short term issues were not to be referred to RPAG.

3. TERMS OF REFERENCE

The Terms of Reference specified for RPAG, were as follows:

- establish principles to guide the management of growth in the region to achieve agreed social, economic and environmental objectives:
- identify gaps in policies;
- identify priority tasks;
- advise on the impact of specific policies;
- consultation to ensure that all views are considered;
- develop a regional planning framework;
- investigate methods and locations for waste disposal



4. REPORTING RELATIONSHIP TO QUEENSLAND GOVERNMENT

The institutional arrangements for RPAG are shown in Figure 4. RPAG reports to the Standing Committee of Cabinet on Planning and Infrastructure Co-ordination (PIC) and thereafter to Cabinet. Initially the chairman of PIC, the Deputy Premier, was also the chairman of RPAG. However with a change of portfolios, the Minister for Housing, Local Government and Planning became the new Chairman of RPAG. There is also the PIC-IDC which is the interdepartmental committee comprised of Directors-General or their representatives.

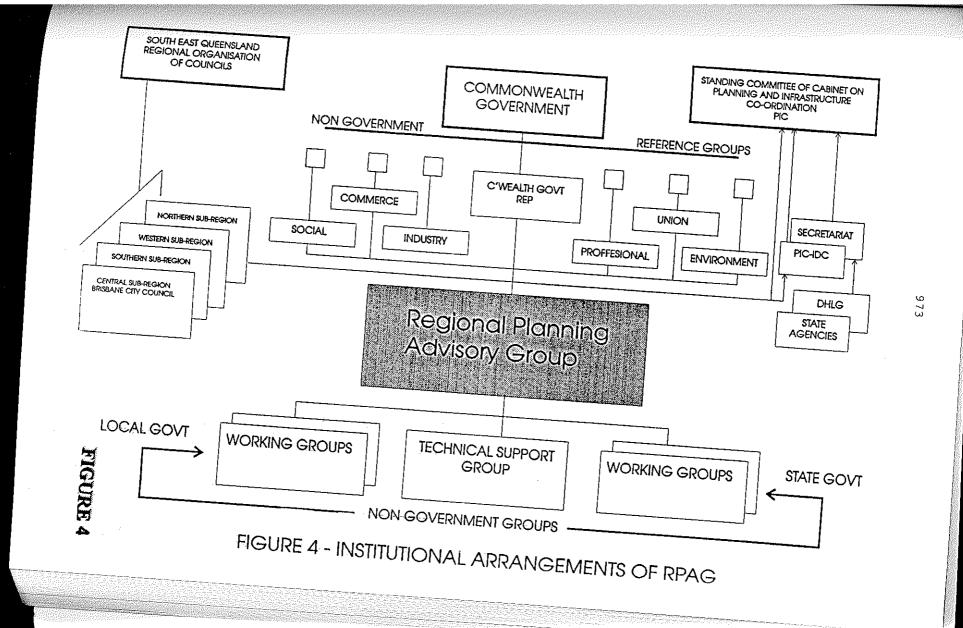
To date a summary submission on the outcomes of SEQ 2001 has been presented to PIC-IDC, also to PIC and thence to Cabinet who have agreed to a 6 month digestion period, wherein all parties can evaluate and further comment on all working papers produced thus far.

The RPAG also established its own Technical Support Group and subsequently a Director of Co-ordination.

5. PRIORITY TASKS

One of the earliest matters for RPAG was to establish a list of priority tasks and these were:

- Identification of priority tasks that should be progressed as a matter of urgency, for example:
 - Develop strategies to encourage urban consolidation.
- Identification and protection of:
 - Major habitats and wildlife corridors.
 - Extractive mineral resources
 - Water supply dam catchments.
 - Areas of prime agricultural land.
- Development of:
 - Monitoring system for land supply and uptake.
 - Appropriate locations for heavy and noxious industries.
- Identify strategies to consider transport needs in relation to urban development policies.



6. WORKING GROUPS AND MAIN PROJECTS

The RPAG established five (5) working groups to analyse 15 major project areas shown in Figure 5. The working groups were named:

- Environmental Management;
- Social Planning;
- Transport;
- Infrastructure;
- Urban Futures.

The working groups were assigned the task of producing Position Papers which outlined issues and problems within each respective project area. Subsequently these working groups were required to produce suggested solutions to these problems, by way of Policy Papers which recommended policies, strategies and proposed actions in each of the project areas. Unfortunately time and budget constraints have not permitted any major trade off analysis to take place across all policies, nor has it been possible in the time available to produce a comprehensive list of priority projects that could be recommended to Government.

7. TRANSPORT CONSIDERATIONS

To date transport considerations have played, and will continue to play, a major role in the SEQ region's growth management process. The following describes the process adopted to analyse the current issues and various land use scenarios in order to reach a "preferred pattern" of development and the transport principles and strategies to support such a pattern.

7.1 TRANSPORT POSITION PAPER AND POLICY PAPER

The Transport Position and Policy Papers were produced by the Transport Working Group of RPAG, which was completely independent of the Department of Transport. The authors of this paper represented the Department on this Working Group and the Project Managers for each paper were supplied from the Department's Policy and Planning Unit. It must be stressed the prime role of these officers was to serve the needs of, and record the determinations of, the working group - not those of the Department. It should be noted that there are some actions recommended by the Working Group which the Department does not support and which are quite contrary to current Government transport policy.

The Position Paper examined the current situation for transport within the region indicating current issues and problems, categorised as follows:

- Travel Demand;
- Land Use Planning;
- Efficient Delivery of Transport;
- Impacts (Economic, Social and Environmental).

In support of this work the Department tabled its transport planning activities in the Region with particular emphasis on those studies which pertained to the region or studies which examined particular aspects such as Passenger Transport (SEPTS) 1991, the Metropolitan Freight Study, Brisbane Travel Characteristics Study (1987) and the Road Network Analysis. A more comprehensive, but not exhaustive, list of the Departmental and external work studied by the Transport Working Group is referred to in Appendix A to this paper.

The Policy Paper consolidated the issues into five (5) major areas, namely:

- Transport/Land Use Integration;
- Institutional Arrangements and Funding;
- Economic Development and Freight Transport;
- Urban Passenger Transport;
- Environmental and Social Impacts.

It then outlined Principles upon which its recommended Policies and Actions were based, the Policy Paper reviewed Major Trends and Issues in Fransport. These two documents are commended to you for further reading.

7.2 ANALYSIS OF ALIERNATIVE LAND USE SCENARIOS

The next major area of analysis concentrated on land use and transport interactions. This was carried out by the Department, first for the Urban Futures Working Group but more recently for the Technical Support Group of RPAG, who were engaged in the task of producing a preferred development pattern for the region.

Land use and transport are inextricably bound up in a two-way relationship. In summary, we can say, land use creates demands for transport and also that transport shapes land use.

A simple depiction of these land use transport interactions is shown on Figure 6.

The first relationship is our day-to-day travel requirements which arise because our homes are not at the same location as our workplace, shops, schools and recreation areas. The location of these directly effects the amount of travel we undertake to benefit from them. If the journeys are too long, we tend to think they are not worth the time or trouble. If on the other hand travel is short and easy, we may participate in even more activities. "Country Squires" may suffer a long journey to work, but the family enjoys a larger home, on cheaper land, on the very fringe of the city, where "siblings" have a horse and are members of the local pony club. Such people speak of "the peace and quiet of their rural environment" with their bushland and hills. We mention these folk to point out that not everyone's main ambition in life is to minimise travel time. They view the extra 30 minutes travel time each day as a small price to pay for the other semi-rural and rural residential benefits!

The second relationship is, we suggest, more subtle. When a new rail link or road is planned and announced land values invariably increase - why? - because the land is now more accessible from other parts of the region. Thus a new transport initiative stimulates the urbanisation process (in those areas it serves) and so shapes the pattern of growth in the region.

Historic growth patterns in the region can be traced back to transport initiatives and we feel it is important to appreciate this point. The addition of a rail line improves accessibility (especially at stations). To the extent that other areas gain better accessibility than previously available, the rail line addition may also be viewed as a mechanism promoting urban sprawl. Transport operators usually prefer long distance travellers, on "line-haul" routes, as these give a better revenue/cost position than that of the short distance commuters. Therefore consolidation policies may not be supported by a new rail line.

FIGURE 6

On the other hand if higher densities are achieved around rail stations this could lead to a more intensive use of some of these lands. This would be consistent with consolidation policies and could promote a greater use of Urban Public Transport (UPT) and more walking and cycling. This also may reduce the need for some roads and improve accessibility and mobility for those without available cars.

Time and resources were not available to devote to a full transport/land use modelling exercise. Previous experience also indicated such exercises were extremely "data hungry".

The Department was anxious to examine different land use scenarios because current indications were:

- a strong perception that journeys were taking longer time.
- UPT deficits were increasing.
- the UPT vs Road functions, market share and funds debate needed to be resolved.
- isolated, unsequenced peripheral growth was proving to be expensive to service.
- the need to advise RPAG of our view on the more subtle side of the land use/transport interactive process.

The Urban Futures Working Group in close consultation with RPAG's Technical Support Group produced seven (7) alternative growth scenarios for the region. At the time these were called:

- Trend:
- Northern;
- South Western;
- South East;
- Interior/Dispersed;
- Concentrated:
- Consolidated.

As some of these names imply, major shifts in population concentration were considered for various sub-regions. These seven (7) preliminary land uses were evaluated with the assistance of a consultant (Epell Consulting) who prepared a subjective, qualitative report. Department officers met with project managers from the other working groups and the Technical Support Group to help derive three (3) or four (4) land uses that warranted more detailed evaluation.

RPAG established a new Steering Group to review work produced to date and shortly thereafter four (4) major land use scenarios were specified to be evaluated. These were:

- Trend:
- Central;
- Coastal Concentrated;
- Coastal Dispersed.

A regional transport model was established with consultants Bornhorst Ward and Veitch Pty Ltd, in conjunction with the Transport Studies Section of the Department of Transport, who quickly linked together the Brisbane model, with those previously devised for the Gold Coast (South), the Sunshine Coast (North) and Toowoomba Region (West). Additional model development was carried out for the more remote areas. At the end of the day we had a regional transport model called the South Coastal Area Travel Estimation Model (SCATEM) which was used for a more quantative analysis using varied population distributions and work locations.

Use of this model enabled the performance of the land-use scenarios to be critically appraised for a variety of evaluation criteria. These included transport network efficiency measures such as the monetary value of time spent travelling and vehicle operating costs, as well as equity issues as reflected in accessibility indicators and environmental measures relative to air quality. Out of nine (9) major evaluation criteria relating to transport, the two land uses involving higher urban density (i.e. Central and Coastal Concentrated) out-performed the other two options (Trend and Coastal Dispersed) in all aspects. There was little to choose between the two better-performing options. These concentrated land use options generated significant benefits with respect to road based travel, vehicle operating costs and travel time savings. These benefits however have to be weighed against higher capital investment and operational funding for UPT. A summary of this analysis is presented in Table 2. It is well worth the effort to review the transport and land use implication of this Preferred Pattern of Development.

7.3 PREFERRED LAND USE PATTERN

The Steering Committee then derived its preferred land use pattern from a consensus of all sectors.

The Department of Transport and the consultant again analysed this preferred land use pattern, demonstrating its advantages and superiority over current trends. Both a low and high public transport usage was considered for the preferred land use. A summary of this analysis is shown in Table 3. The low transit (Low UPT) use scenario for the preferred pattern assumes that the current document role of the private motor vehicle will continue. The "High UPT" scenario reflected the Steering Committee's most optimistic assessment of the role of transit (ie. significantly increasing).

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TABLE 2 : TRANSPORT IMPLICATIONS OF ALTERNATIVE LAND USE (2011)					
CRITERIA September 1985	UNITS - MEASURE	TREND (LOW UPT)	CENTRAL (HIGH UPT)	COASTAL CONCENTRATED (HIGH UPT)	COASTAL DISPERSED (LOW UPT)
Vehicle Trip Characteristics in year 2011	Av Trip Distance Av Trip Time Km Travel/Day Vehicle Hrs/Day Av Speed Av Speed	15.2 km 33.7 min 87.5 million 3.2357 million 27 km/hr	14.5 km 27.9 min 79.2 million 2.5357 million 31.3 km/hr	13.6 km 27.2 min 74.3 million 2.4815 million 30.0 km/hr	15.9 km 38.0 mm 95.5 million 3.9099 million 25.1 km/br
Annual Vehicle Operating Cost (excludes PT Vehicles) in year 2011	• Fuel and Vehicle Maintenance	\$5,264 million pa	\$4,570 million pa	\$4,431 million pa	\$5,811 million pa
Value of Time Spent Travelling (annual) in year 2011	Trips by Private Car and Commercial Vehicle	\$8,962 million pa	\$7,023 million pa	\$6,890 million pa	\$10,513 million pa
Public Transport Ridership in year 2011	Percent PT Usage	7.2%	11,2 (Higher Public Transport Ridership assumed for analysis)	10.7 (Itigher Public Transport riderahip assumed for analysis)	8.1
Accessibility to: in year 2011	Employment (mins) Regional Centres (mins)	45,0 42.8	40.1 35.7	43.9 45.9	47.6 55.8
Congestion by Sub-Region in year 2011	Av Volume/Capacity Ratio by Corridor: South East Southern Western Northern Eastern CBD Av for Region:	1.15 0.94 0.78 0.87 1.01 1.02	0.96 0.78 0.93 0.73 0.79 0.92 0.87	0.95 0.69 0.67 0.93 0.73 0.89 0.86	1.15 0.87 0.8 1.09 0.86 1.06 0.96
Vehicle Emissions (tonnes/km²) in 2011	Carbon Monoxide Hydrocarbone Nitrous-Oxides	24.7 5.5 2.5	19.9 4.6 2.3	19.6 4.5 2.2	28.2 6.1 2.8
Accidents in year 2011	Annual Cost of Accidents (Smillion/sensum) + Number of Fatalities + Accidents with Injury + Property Damage	\$420 million 310 10 016 10 326	\$377 279 9001 9280	\$352 260 8392 8652	\$463 342 11049 11391
Road Infrastructure Cost (additional) ^(a) - required over period 1993 - 2011	New Developments Upgrade Existing System Road Maintenance increase Total Cost:	\$8,800 million \$8,700 million \$122 million \$17,622 million	\$5,900 million \$7,900 million: \$63 million \$13,863 million	\$6,000 million \$8,000 million \$58 million \$14,858 million	\$8,300 million \$11,500 million \$132 million \$19,932 million
Urban Public Transport Cont ^{en} in paried 1993 - 2011	Operating Cost Increase (1991-2011 total) Capital Cost (1993 3) Total UPT Cost:	\$2,700 million \$340 million \$3,040 million	\$4,000 million \$900 million \$4,900 million	\$3,800 million \$790 million \$4,590 million	\$2,500 million \$260 million \$2,760 million
Total Transport Infrastructure and Maintenance Cost (includes only items 1 and 2 above)	• Road and UPT Services	\$20,662 million	\$18,763 million	\$19,448 million	\$22,692 million

IABLE 3: IRANSPORT IMPLICATIONS OF PREFERRED LAND USE (2011)				
Criteria	Units - Measure	Trend Option	Preferred Low UPT	Preferred High UPT
Vehicle Trip Characteristics in year 2011	Av. Trip Distance Av. Trip Time Km Travel/Day Vehicle Hrs/Day Av. Speed	15.2 kms 33.7 mins 87.5 mill 3.236 mill 27.0 kph	14.8 kms 31.3 mins 86.8 mill 3.069 mill 28.4 kph	14.3 kms 26.6 mins 78.2 mili 2.430 mili 32.3 kph
Annual Vehicle Operating Cost (excludes PT vehicles) in year 2011	Fuel and Vehicle Maintenance	\$5.264 mill	\$5,082 mili	\$4.433 milt
Value of Time Spent Travelling (annual) in year 2011	Trips by Private Car and Commercial Vehicle Trips by Transit	\$8,962 mill \$692 mill	\$8,484 mill \$677 mill	\$6,731 mill \$906 mill
	Total Time Value:	\$9,654	\$9,161	\$7,637
Public Transport Ridership in year 2011	Percent PI Usage	7.2	7.4	11.0
Accessibility to:- in year 2011	Employment (mins) Regional Centres (mins)	45.0 42.8	44.3 37.5	40.9 34.3
Congestion by Sub-Region in year 2011	Av. Volume/Capacity Ratio by Corridor:			
	South East Southern Western Northern	1.15 0.94 0.78 0.87	I 01 0 77 0 77 0 91	0.98 0.74 0.74 0.88
	• Eastern • CBD	1.01 1.02	0.80 0.93	0.77 0.91
	Av. for Region	0 96	0 89	0.87
Vehicle Emissions (tonnes/km²) in year 2011	Carbon Monoxide Hydrocarbons Nitrous-Oxides	24.7 5.5 2.5	23.6 5.4 2.5	19.3 4.6 2.3
Accidents in year 2011	Annual Cost of Accidents (Smillions/annum)	\$420 mill	\$414 miļi	\$372 mili
	Number of Fatalities Accidents with Injury Property Damage	310 10,016 10,326	306 9,872 10,178	275 8,860 9,135
Road Infrastructure Costa ⁽¹⁾ (additional) in period 1993-2011	New Developments Upgrade Existing System Road Maintenance Increase Fotal Cost:	\$8.800 mill \$8,700 mill \$122 mill \$17,622 mill	\$5 600 mili \$9,300 mili \$116 mili \$15,016 mili	\$5,600 mill \$7,000 mill \$84 mill \$12,684 mill
Urban Public Transport Costs th (additional) in period 1993-2011	Operating Cost Increase (1991-2011 total) Capital Cost (1993 \$) Total UPT Cost:	\$2.700 mill \$340 mill	\$2,900 mill \$400 mill	\$4 200 mill \$970 mill \$5,170 mill
Total Transport Infrastructure and Operating/Maintenance Cost (includes only items 1 and 2 above)	Road and UPT Services	\$3,040 mill \$20 662 mill	\$3,300 mill \$18 316 mill	\$17.854 mill

Table 3 also indicates that the Preferred Land Use option out-performs Trend even with the conservative "Low UPT" assumption. Public Transport ridership is enhanced, accessibility is improved and total transport costs are reduced. Vehicle emissions are slightly reduced. Under the more optimistic UPT scenario, road based transport costs for private car and commercial travel reduce significantly, as do vehicle emissions. However capital investment in UPT will more than double relative to the Trend option, whilst transit operating costs will increase by 56%. On balance however, the Preferred land use option performs significantly better than Trend irrespective of the transit ridership assumption adopted.

The main features of the Preferred Pattern of urban development for South East Queensland over the next 20 years are:

- More contained and compact urban development with the main urban areas being Metropolitan Brisbane, the Sunshine Coast, the Gold Coast/Albert, and Toowoomba.
- An accelerated rate of urban development in the Brisbane City area and in Pine Rivers/Caboolture.
- An increased rate of employment and community services growth in three "Metropolitan Centres" at Pine Rivers, Logan Central and Ipswich.

These centres would contain a wide range of metropolitan functions, would serve a population catchment of up to 500,000 people and would be located on rail lines.

More emphasis on urban public transport serving the CBD, Metropolitan Centres and regional centres and moderation of the growth of urban arterial roads.

However completion of the Eastern Corridor and the development of a new western bypass arterial road is recommend to link the Ipswich and Pine Rivers Metropolitan Centres. This will essentially complete a circumferential bypass road system for Brisbane.

 Improved protection for important environmental land resources, rural areas, air quality and water quality

The above features are illustrated in the "Preferred Pattern of Urban Development" and the "Environmental Constraints on Urban Development" maps which form part of the Draft Regional Outline Plan (DROP) and Regional Framework for Growth Management (RFGM) produced by the SEQ Technical Support Group.

The population distribution for the preferred pattern is shown in Table 4.

Table 4

POPULATION GROWTH DISTRIBUTION IN PREFERRED PATTERN

Planning Area	1991	2011	Population Growth	% Growth
Sunshine Coast	154,000	270,000	116,000	75
Pine Rivers/Caboolture	199,000	440,000	241,000	121
Brisbane City	751,000	980,000	229,000	30
Redland	81,000	142,000	61,000	75
Ipswich/Moreton	120,000	215,000	95,000	79
Logan	189,000	310,000	121,000	64
Albert/Gold Coast	. 273,000	450,000	177,000	65
Toowoomba	82,000	133,000	51,000	60
Other Areas	82,000	133,000	51,000	60
Regional Total	1,930,000	3,050,000	1,120,000	58

SOURCE: Queensland Department of Housing, Local Government and Planning - High Series Projections.

The population location, employment decentralisation and major centres components of the Preferred Pattern of urban development establishes a future pattern of travel demand (78.2 million km/day compared to 87.5 million under Trend) which in comparison to the alternative patterns achieves:

- lowest environmental impact (energy consumption and vehicle emissions).
- highest accessibility (lower average trip distances and times; shorter travel times to employment and major centres).
- lowest overall infrastructure costs after allowing for substantial increases in public transport investment.

Compared to Trend, the Preferred Pattern will aim to increase public transport patronage from 7.6 per cent to 11.2 per cent and increases the percentage of the population within 4km of rail stations from 57.5 per cent to 61.8 per cent.

7.4 TRANSPORT PRINCIPLES UNDERLYING REGIONAL OUTLINE PLAN

1. Transport planning and investment should be seen as a primary instrument for achieving the strategic environmental, accessibility and economic objectives of the Regional Outline Plan.

The focus should shift from responding to demand on a local or subregional basis to influencing demand by supporting the achievement of the population, employment and centres objectives.

- While the bulk of resource allocation in the transport sector will continue to be on roads, significant increases in allocations for public transport facilities and services is warranted and can be justified in terms of overall economies in transport expenditure under the preferred pattern by comparison with the trend or the other patterns considered.
- Priority in resource allocation should go to measures which improve the accessibility and attractiveness of the future Metropolitan Centres even at the expense of allowing levels of congestion on the radial CBD lines and on long distance intra-urban arterials.
- 4. Provision should be made at an early date for protection of the routes of a high capacity peripheral freeway system for inter-urban travel.

The development of this system should be staged to ensure that it complements and does not forestall the emergence of the Metropolitan Centres or the improved public transport system.

7.5 STRATEGIES

The preparation of a Regional Transport Development Program by the Department of Transport which provides for passenger (private and public) and freight movement in the region in a manner which is consistent with the adopted Regional Outline Plan. This program should include both social and environmental impact assessments of major new transport corridors.

The public transport component of the strategy should include:

- New or improved infrastructure and services to facilitate:
 - Completion of the Beenleigh to Robina rail line.
 - Construction of a Petrie to Kippa Ring rail extension.
 - Completion to the Ipswich to Rosewood electrification.
 - Continued improvement to rail line capacity in the CBD.
 - Expansion of a comprehensive bus system operation on the road network and designed to provide services to the metropolitan and other designated centres and for cross regional linkages not adequately serviced by the rail network.
- This new or improved system to be achieved where practical by implementing a program of bus priority lanes along routes with high potential bus flows, or even in exclusive Urban Public Transport (UPT) corridors.
- Provision of efficient and attractive interchanges at the metropolitan and regional centres and other facilities, as well as the co-ordination of fare structure, timetable frequency, ticketing structure and transport information.
- Special consideration be given to providing the requisite UPT needs of the identified disadvantaged areas.
- UPT planning to be co-ordinated, promoted, programmed and financed by a new Regional Transit Authority/Agency.

The road network component of the strategy to include:

- Peripheral arterials for large volumes inter-urban traffic should be established around the main Brisbane Metropolitan area.
- A west of Brisbane by-pass link between the Warrego Highway in the south west and the Bruce Highway in the north.
- The extension and completion of an eastern corridor link from Nerang to the Gateway Arterial.
- Completion of the Sunshine Motorway from the Bruce Highway south of Caloundra to west of Noosa.
- The upgrading of the Logan Motorway between Ipswich and Beenleigh.

- The identification of principal locations where major improvements to the existing main roads would be required to ensure high traffic volumes are kept off the sub-arterial and major local roads, and to develop a comprehensive improvement program, as part of the proposed Regional Transport Development Program.
- Road improvements to provide for cross regional bus routes and feeder buses to the centres will also require further investigation in the post RPAG period.

The freight and industrial component includes the following strategies:

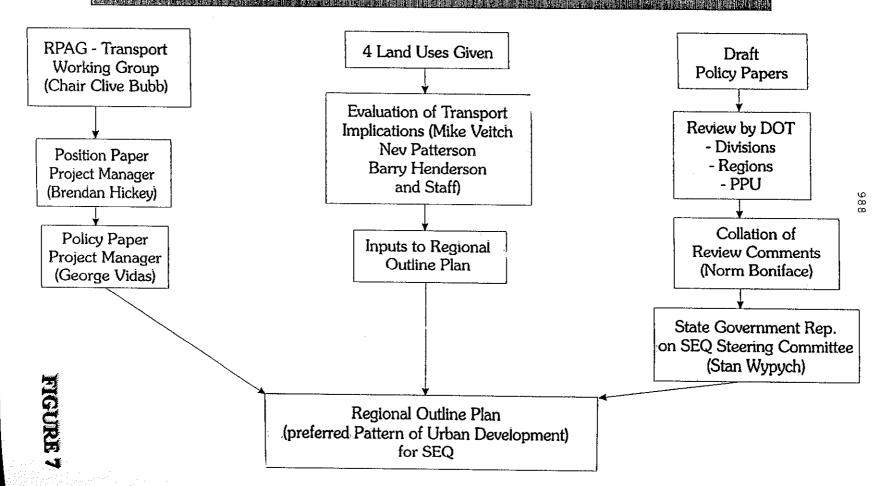
- The freight and ports access component of the strategy should improve the transport infrastructure serving long distance and high volume freight movements to achieve economic benefits and reduce the detrimental impacts of heavy vehicle traffic in urban areas.
- The following specific components should be included:
 - Extension of the suburban rail system to serve the domestic and international air terminals.
 - Completion of the program to extend the standard gauge rail network to the Gateway Port.
 - The establishment of another major freight terminal in the northern metropolitan area similar to the Acacia Ridge centre.
 - Improvement of road access between commercial and industrial areas and between the Port and Airport and a southern by-pass route south of Inala-Ipswich

7.6 REVIEW OF OTHER WORKING GROUPS' PROJECTS

The third thrust of work for the Department in this regional planning exercise was to review and comment on the Policies and Actions proposed by all other papers emanating from the working groups.

This three pronged approach to transport planning activities namely the Policy Paper, the Land Use/Transport analysis and the Review of other project outputs are shown in Figure 7.

FRANSPORT INPUTS TO SEQ 2001 REGIONAL PLANNING STUDY



8. FINAL OUTPUT

The final output from this SEQ 2001 process is the Regional Framework for Growth Management (RFGM), which comprises the vision, a series of summary policy papers (from each of the working groups), a Draft Regional Outline Plan, the services needed to deliver the plan and proposed new institutional arrangements. Any casual reading will quickly determine the significance of Transport within this process. For those of you who have not done so, may I strongly commend this RFGM document to you.

9. CONCLUSION

The significant feature that emerges from this exercise is that Transport whilst quite significant, is but one of several regional aspects that is influenced by, and which in itself can influence, future land use patterns. Clearly a more comprehensive Transport/Land use model would have been desirable, but time and lack of data did not permit such work proceeding. We felt that economic development aspects should have enjoyed more emphasis in the planning work. Clearly regional transport planning will be a far more complex and interactive process in the future!

REFERENCES

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APPENDIX A

REFERENCES USED BY THE SEQ2001 TRANSPORT WORKING GROUP

A. Completed Major Transport Related Studies in South East Queensland

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- Route 20 Study: Recommendation Report and Executive Summary: Sinclair Knight and Partners, Brisbane, 1989
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- 12. The Stimson Report, Brisbane Magnet City: R J Stimson, Brisbane City Council, 1991.
- Eastern Corridor Planning Study: Executive Summary and Main Report: Rankine and Hill, Planning Workshop, Brisbane 1992.
- 14. Key Port Brisbane Strategic Plan to 2005 and Beyond (Draft): Port of Brisbane Authority, 1992.

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- 16. Brisbane Region Freight Movement Study, Phase 1 Report: Queensland Department of Transport, 1992.
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B. Major Transport Related Studies in Progress (March 1993)

- 1. Brisbane Integrated Transport Study (BITS): Department of Transport, Queensland.
- 2. Metropolitan Freight Movement Study (Brisbane): Department of Transport, Queensland.
- 3. Road Network Strategy: Department of Transport, Queensland.
- 4. Standard Gauge Rail Link to Fisherman Island Impact Assessment Study: Maunsell, Department of Transport, Queensland.
- 5. Caboolture Transport Study: Department of Transport, Queensland.
- 6. Gold Coast/Albert Transport Study: Department of Transport, Queensland.
- 7. Sunshine Coast Transport Study: Department of Transport, Queensland.