# Transport Sector Plan 2014 – 2019



# Sector Analysis Volume II

"A TransportNetwork to Future Prosperity"

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Currency used in the report is Samoan Tala unless otherwise indicated

# List of Acronyms

ACC	Accident Compensation Corporation
ADB	Asian Development Bank
AG	Office of the Attorney General
ATO	Authorised Traffic Officers
AusAID	Australian Agency for International Development
CAD	Civil Aviation Division (of MWTI)
CBA	Central Business Area
CDC	Cabinet Development Committee
CEO	Chief Executive Officer
CRWCR	Enhancing the Climate Resilience of the West Coast Road [Project]
EIB	European Investment Bank
ERAP	Enhanced Road Access Project
EU	European Union
FY	Financial year (1 Jul to 30 Jun)
GDP	Gross Domestic Product
IA	Implementing Agency
IAMP	Infrastructure Asset Management Plan
ΙΑΤΑ	International Air Transport Association
ICAO	International Civil Aviation Organisation
IDA	International Development Association
IMO	International Maritime Organisation
ISIC	International Standards on Industrial Classification
ISPS	International Ship and Port Facility Security
JICA	Japan International Cooperation Agency
LTA	Land Transport Authority
MEF	Monitoring and Evaluation Framework
MFAT	Ministry of Foreign Affairs and Trade
MNRE	Ministry of Natural Resources and Environment
MOF	Ministry of Finance
MTEF	Medium Term Expenditure Framework
MWTI	Ministry of Works, Transport & Infrastructure
NGO	Non-Governmental Organisation
NISP	National Infrastructure Strategic Plan
NPSO	National Private Sector Organisation of Samoa
NZCAA	NZ Civil Aviation Authority
PACERPlus	Pacific Agreement of Closer Economic Relations Plus
PASO	Pacific Aviation Safety Office
PFL	, Pacific Forum Line
PFMR	Public Finance Management Reform
PICTA	Pacific Island Countries Trade Agreement
PPD	Planning and Policy Division (of MWTI)
PSC	Project Steering Committee
	,

Public Sector Investment Plan
Planning and Urban Management Agency (of MNRE)
Samoa Airport Authority
Strategy for the Development of Samoa
Second Infrastructure Asset Management [Project]
Samoa Land Corporation
State Owned Enterprise
State Owned Enterprise Monitoring Division (of MOF)
Samoa Ports Authority
Samoa Shipping Corporation
Samoa Tourism Authority
Samoa Umbrella of Non-governmental Organisations
Technical Assistance
twenty foot equivalent unit
Transport Sector Coordinating Unit
Transport Sector Plan
Transport Sector Steering Committee
United National Framework Convention on Climate Change
World Bank
West Coast Road
World Trade Organisation

# Chapter 1: Sector Performance Review 2008-2012

#### **1.1 Overview**

- a. Samoa's transport sector includes all modes of transport via air, sea, and land. The two main islands are well served by tar-sealed ring- and cross-island roads. Samoa's geographically compact nature and its road and shipping network make transport between and within islands relatively easy, thus facilitating access to centralised government services. There is an international port which links Samoa and her main trading partners, and domestic ports hosting regular inter-island ferry services between the two main islands. Regular flights are available on a daily basis to cater for international and inter-island travel.
- b. The airports, road networks, and ports are essential to Samoa's economic development as they enable the safe and efficient movement of people, goods and services thereby contributing to growing domestic and international trade and commerce. The provision of safe and efficient access to key social services, including schools and health facilities, is also dependent on good transport networks. The transport and communication sector contribution to GDP<sup>1</sup> at market prices shows a significant growth of 89 percent (\$85 million to \$162 million) from 2001 to 2012 as shown in Figure 1 below.

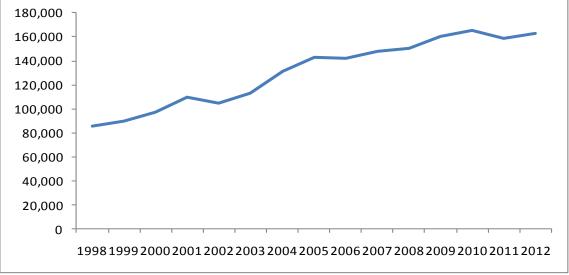


Figure 1: GDP Contribution, constant prices, 2001-2012

Source: Ministry of Finance

c. Government current spending<sup>2</sup> in the sector has averaged around \$65 million per annum with current expenditure peaking at \$76.5 million in 2010/11 as shown in **Figure 2.** Key major developments that have affected spending in the sector include the construction of sports facilities and roads for the South Pacific Games in 2007 as well as the reconstruction and recovery work undertaken following the September 29<sup>th</sup> tsunami in 2009. The decreasing trend

<sup>&</sup>lt;sup>1</sup>Calculation of transport sector contribution to GDP and employment in Samoa is combined with the communication sector given the relatively small figures currently attributed to the transport sector itself.

<sup>&</sup>lt;sup>2</sup> Current expenditure (according to government finance statistics) excludes loan and grant funded expenditures.

in domestically funded infrastructure and transport expenditure correlates with the corresponding increase in development funded capital projects over the same period.

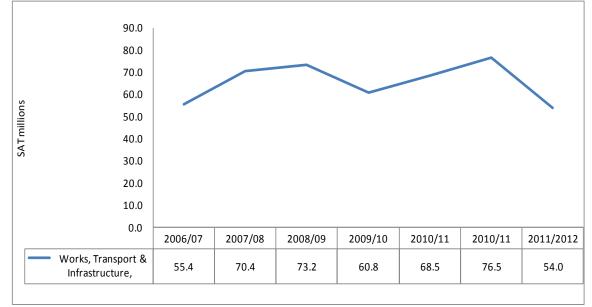


Figure 2: Current Expenditure on Works, Infrastructure and Transport, 2006/07-2011/12

Source: Ministry of Finance

- **d.** Based on the review of the sector<sup>3</sup>, the contribution of transport related employment to total formal employment numbers in the economy has increased from 5.8 percent in 1999 to 6.9 percent in 2009. These numbers were derived from the Samoa Bureau of Statistics census data as well as Samoa National Provident Fund employee records. Unfortunately other potential sources of employment data are not regularly updated or monitored, so it not possible to track and analyse employment trends in the transport sector.
- e. There are five main public sector transport organistations: the Ministry of Works, Transport and Infrastructure (MWTI), the Land Transport Authority (LTA), the Samoa Ports Authority (SPA), the Samoa Shipping Company (SSC) and the Samoa Airport Authority (SAA). Data collected during the review showed that the number of employees in the key sector public agencies was 716 at end of 2012/13 financial year as in Figure 3 below. It is expected this number will increase across the sub-sectors given the level of development and investment works planned to be undertaken in the next five years and beyond. The sector needs to develop a robust database and system for reporting and monitoring both formal and informal employment in the sector (publicly and privately funded) to ensure reliability of data.

<sup>&</sup>lt;sup>3</sup>MOF, Transport Issues Paper, 2011.

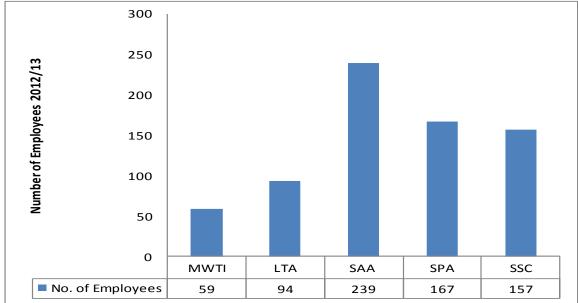


Figure 3: Number of Employees in Key Transport Sector Agencies, 2012/13

Source: Sector Agency Corporate Plans

## **1.2 Land Transport Sub-sector**

#### Policy and Regulatory Frameworks and Service Provision

- a. The core public institutions in the land transport sub-sector are the MWTI, LTA and the Ministry of Natural Resources and Environment (MNRE). There are several private sector service providers and contractors involved with road engineering, design, planning and supervision as well specialised contractors for the construction and maintenance of national roads. The private sector also provides public transport, such as bus services and taxis as well as freight movement and distribution through a number of trucking companies.
- b. The 2009 separation of LTA from MWTI continued institutional strengthening initiatives by the Government of Samoa to reform its land transport sector. Central to the reform was the complete separation of policy and regulation from service provision in all transport modes, with the additional outsourcing of services in line with Samoa's Strategy for the Development of Samoa (SDS) intent to develop the private sector as an engine of economic growth.
- c. The Land Transport Division within MWTI is tasked with establishing, maintaining and implementing a policy framework for land transport that enables LTA to provide a safe, efficient and effective national road network for Samoa. The division is also responsible for creating policies and regulations concerning road safety in Samoa to progressively reduce deaths and injuries from road and vehicle related accidents. Core functions relate to key implementing provisions under the MoW Act 2002 which includes the formulation of policies related to the management, construction and maintenance of public assets<sup>4</sup> in accordance with the Act.

<sup>&</sup>lt;sup>4</sup>Defined as roads including culverts and fords, road reserves, footpaths, bridges, drains and seawalls.

- d. The Policy and Planning Division is a recently established output under the MWTI 2013/14 budget. The main role of the Division is to provide expert analysis and policy advice on national issues affecting the sector and formulate strategic planning documents to guide the sector as well as the Ministry. Key focus is to ensure the advice provided to the sector is informed by comprehensive research, analysis and consultation.
- e. The key objectives of LTA are to provide a safe and secure land transport network whilst promoting environmentally sustainable practices through effective management and enforcement. The authority is primarily responsible for construction and maintenance of national roads, improving standards of public transportation, effective enforcement of road safety codes, rules and regulations as well as setting traffic-related fees and charges. The existing LTA Act 2007 highlights regulatory functions which over-rides certain provisions of the MoW Act 2002. Recent consultations between LTA and MWTI have identified key areas to be clarified under each Act and steps are currently being undertaken by each agency to clarify their respective roles.

#### Existing Road Network and Capacity

- a. The road network in Samoa is the responsibility of LTA from 2007 when responsibility for managing and maintaining was transferred from MWTI. The existing LTA database of roads gives the latest road network data for 2010 and 2012. The reported road network data prior to 2010 were based on the estimates provided by the former Department of Public Works (for 1970-1990) and by Opus International for 2001 (refer Table 1).
- b. The transport sector assessment undertaken by the World Bank in January 2013 found there were 2,340 km of roads, 332km (14 percent) of which were paved<sup>5</sup>. The apparent discrepancy requires action by the Transport Sector Steering Committee in conjunction with the Ministry of Finance to ensure validation of recent road network data estimates by the World Bank are consistent with LTA database.

Classification	1970	1980	1990	2001	2010	2012
Principal road network						
Apia town roads	32	69	75		476 <sup>6</sup>	476
Primary roads	378	396	407		170 <sup>7</sup>	179
Secondary roads	129	334	340		439 <sup>8</sup>	497
Sub-total	539	799	822	847		

#### Table 1: Road Network (kilometres)

<sup>&</sup>lt;sup>5</sup> Source: Samoa Post-disaster Needs Assessment Cyclone Evan 2012 - PDNA Report March 2013

<sup>&</sup>lt;sup>6</sup>Class 1 roads, LTA Database

<sup>&</sup>lt;sup>7</sup>Class 2 roads, LTA Database

<sup>&</sup>lt;sup>8</sup>Class 3 roads, LTA Database

Classification	1970	1980	1990	2001	2010	2012
Plantation & village roads	282	1,234	1,500 (est)	680*		
Total	821	2,042	2,322 (est)	2,177 (est)	1085	1152
Of which paved	120	209	158	665		

Source: Land Transport Authority and Ministry of Finance

c. Based on the number of vehicles registered with LTA since 2008, traffic has been increasing by approximately 116 percent over a period of 6 years (refer **Figure 4**). This rate of growth is considered unsustainable on our current roads and appropriate policy measures should be put in place to ensure a sustainable growth over the plan period.

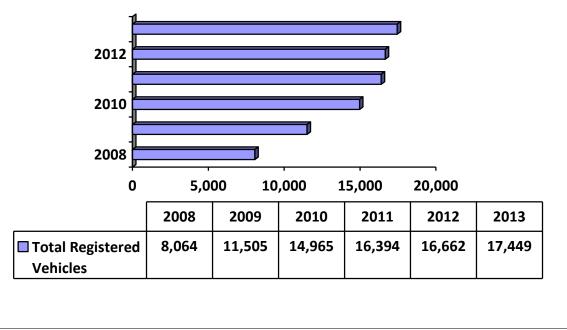


Figure 4: Number of Registered Vehicles 2008-2013

### Investments & Climate-Proofing

- a. Based on the LTA Corporate Plan 2013 2015 the following key strategic issues and programmes will be targeted for development over the plan period:
  - Enforce greater performance and accountability from road, drainage and lawn mowing contractors involved in the core maintenance and development network;
  - Manage the following remaining Second Infrastructure Asset Management (SIAM-2) projects, including issues emerging from landowner disputes and delays:
    - Extension of Vaitele Street widening from Lepea to Vailoa (now substantially completed);
    - Construction of Togafuafua Two-Lane Bridge (now officially opened);

Source: Land Transport Authority

- Construction of Vaimoso-Uta Bridge (now under construction).
- Manage the rehabilitation programmes for roads, fords, bridges, seawalls, and drainage infrastructure on both islands;
- Plan and implement a new Driver Licensing System and Demerit Point System;
- Introduce legislations which allows LTA authorised traffic officers to perform other duties and tasks in addition to issuing traffic offence notices;
- Introduce speed cameras;
- Carry out relevant studies regarding the installation of parking meters in the town area;
- Introduce and enforce bus timetables, bus stops and taxi meters;
- Introduce and enforce standards for public transport (buses and taxis);
- Develop and implement plans for capability and capacity building, training and development of human resources.
- b. The road network faces a range of vulnerability issues noted below which need to be incorporated into future investment plan and project design and construction:
  - Coastal exposure to sea-level rise, storm surge, and wave action during cyclones and tsunamis;
  - Extreme rainfall events causing landslips and surface flooding, resulting in scouring, accelerated potholing (on sealed and unsealed roads) and hazardous ford debris;
  - Damage from earthquakes;
  - Accelerated footpath deterioration caused by rising water tables in some locations.

### **1.3 Maritime Transport Sub-sector**

#### Key Stakeholders and Regulatory Environment

- a. The Maritime Division of the MWTI is responsible for ensuring the safety and security of maritime transportation in Samoa as well as ensuring that the marine environment is not polluted or harmed by shipping. The Maritime Division is also responsible for overseeing Samoa's compliance with various international maritime conventions, protocols and codes.
- b. The Samoa Ports Authority (SPA)<sup>9</sup> was created in July 1999 by an independent Act of Parliament (the Samoa Port Authority Act 1998). At 30<sup>th</sup> March 2012, there were a total of 190 staff members employed by SPA. The Authority currently operates five commercial ports, with Apia Port being the main port of entry for international trade and sea travel and the only port with container handling facilities. SPA is one of six state-owned enterprises considered strategic by the government and is therefore not positioned for privatisation, but commercial functions within the port are open to private contractors. Room exists for increasing charges for use by the private contractors of port facilities and services.
- c. The Samoa Shipping Corporation (SSC)<sup>10</sup> was set up by the Government of Samoa in December 1974 to operate as a limited liability entity. The core business of SSC is ownership and operation

<sup>&</sup>lt;sup>9</sup>It was set up as a pilot profit-making commercial organisation to establish whether or not the self-funding model would be successful.

<sup>&</sup>lt;sup>10</sup>It was established under the NZ Companies Act 1955 and in accordance with the provisions of the Samoa Ordinance 1935. Its primary objective was to operate a vehicular and passenger ferry between Samoa and its neighbouring Islands.

of inter-island shipping services which carry passengers and cargo between Upolu and Savaii and between Samoa and nearby countries. SSC also operates a seafarers' academy to train and up-skill its own employees. In 2005, SSC diversified its business into freight forwarding and a courier service between Upolu and Savaii, as well as between Samoa and American Samoa, utilising its own vessels. SSC has 6 registered vessels, of which two were funded by the Japan International Cooperation Agency (JICA) through aid to the Ministry of Finance (MOF). Those vessels are leased by the SSC. The corporation also provides scheduled and chartered passenger and cargo services from Samoa to American Samoa, Tokelau and Cook Islands. The SSC has no direct competition due to the small scale of the area in which it operates. As at the end of 2012, there were a total of 157 staff members employed by SSC.

- d. Samoa Shipping Services (SSS) was originally established to provide training to seafarers employed by Columbus Shipping Lines. This German company assisted the Government of Samoa to set up a Marine Training School at Faleolo, which later became the School of Maritime Training at the National University of Samoa. SSS currently provides the following services:
  - Management of the container vessel *MV Forum Samoa II* through the Forum Samoa II Joint Venture between SSS and Pacific Forum Line;
  - Crewing services involving a total of 180 seafarers on the following vessels:
    - *MV Forum Samoa II* 17 seafarers;
    - 7 cruise ships 134 seafarers;
    - 6 container vessels –29 seafarers.
  - Shipping agent for the following shipping companies:
    - COSCO Shipping Limited.
  - Freight forwarder for:
    - Vaikolisksia Services;
    - Evan International Freight System.
- e. Pacific Forum Line (PFL) was established in 1978 as a multi-government shipping line, an example of regional co-operation among Pacific Forum nations. It was born from concern over the deterioration of traditional island unscheduled cargo services due to containeriion. However, in October 2012 the Government of Samoa increased its shareholding in Pacific Forum Line from 7.43 percent to 100 percent. Since the takeover, the interim committee set-up by Government to manage the company has acquired two container vessels. These vessels both visit Samoa monthly, one coming from the United States and the other from China. When the interim committee management transition period ends on 31 August 2013, a new board of directors and management team will be appointed to lead the company.
- f. The landlord model employed by SPA allows for the leasing of port cargo storage space to private operators, who provide their own cargo handling equipment (e.g. fork-lifts). The services provided by private companies are regulated by the authority on a reasonable cost recovery basis. Key services provided by private companies include stevedoring, container handling and major maintenance while SPA provides pilotage, dredging, security (to international standards) as well as services to assist tourism promotion.

#### Port Infrastructure and Capacity

- a. There are five primary ports including three on Upolu (Aleipata, Apia and Mulifanua) and two on Savaii (Asau and Salelologa). All of the ports service both passengers and cargo, and the ports of Mulifanua and Salelologa offer important inter-island passenger services.
- b. The Samoa Ports Authority Scoping Study undertaken in early 2013 noted that international container ship arrivals at Apia had reduced from 174 in 2008 to 75 in 2012. This was due to shipping lines rationalising services, the formation of consortium alliances and decisions to trans-ship freight destined to the central Pacific through Fiji. There has been a flattening of export container movements through Apia caused by zero growth in exports of primary produce and locally manufactured goods.
- c. The current container services to Apia, by origin, are:
  - North & East Asia– every 20 days;
  - New Zealand (Consortium Lines) twice per month;
  - New Zealand (Independent Line) monthly;
  - US West Coast– every 15 days;
  - US & China (PFL) every month.
- d. Almost all of Samoa's international sea freight goes through the Port of Apia, which also is the base for coastal vessel passenger and freight movements. The port offers two international berths and coastal/domestic facilities, as well as a container park and space for port-related activities conducted by other public agencies and private sector service providers. There are, however, physical constraints to the harbour and the port which limit SPA's ability to increase the port's productivity and growth.
- e. The change in the number of vessels serving the Port of Apia between 2010 and 2012 is illustrated in **Figure 5.** There has been a decrease of 43% for container ships, 31% for other vessels including yachts and 7% for cruise ships over the three-year period. Key changes during the period include the collapse of Reef Shipping in 2012, the buyout of 100% shares of PFL by the Government of Samoa, and the creation of Greater Pacific Shipping (GPS) through the merger of Pacific Direct Line, Sofrana Unilines and China Navigation.

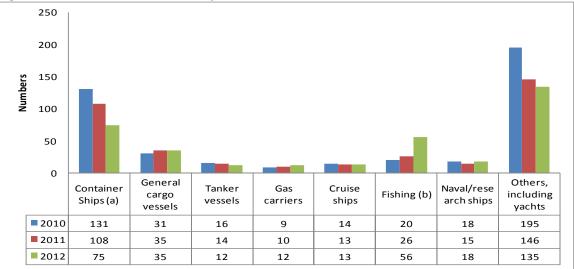


Figure 5: International Vessels to Apia Port, 2010-2012

f. The level of trade volume as at the end of 2012 shown in **Figure 6** below illustrates Samoa's heavy reliance on imported goods and its limited export base. One of the key findings from the Ports Study in 2013 was the imbalance of full import versus full export containers at Apia, which had created a substantial empty back loading expense for shipping lines. Over the past five years, 95% of full import containers have been returned empty from Apia and have effectively inflated the shipping lines in-bound container freight charges.

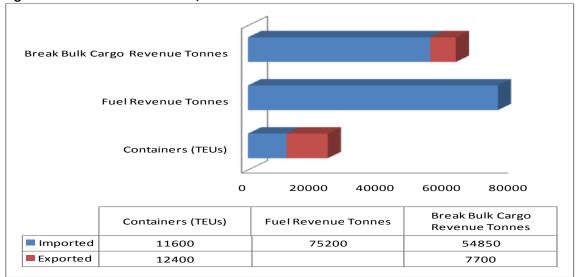


Figure 6: Level of Trade Volume, 2012

Source: Samoa Ports Authority Port Study 2012

Source: Samoa Ports Authority Scoping Study, May 2013

#### Plans & Investments

- a. In early 2013, the Ports Authority undertook a detailed review of its operations following a recommendation from government to assess the future viability of the organisation. A nine-step Action Plan was subsequently developed and featured the following key recommendations:
  - 1. Prepare a debt rationalisation strategy;
  - 2. Introduce best practice management;
  - 3. Review tariffs;
  - 4. Reform to allow full private sector participation in port services;
  - 5. Prepare divestment proposals for non-performing assets;
  - 6. Reduce fixed and variable costs;
  - 7. Increase land and property rental charges;
  - 8. Improve asset management;
  - 9. Develop infrastructure.
- b. Key features of SPA's financial performance are its cash flow and liquidity position. It was noted in the Ports Study that the debt situation was a legacy of borrowings during 2006 – 2009 for development of non-core facilities including the yacht marina and slipway. The tighter cash flow margin is as a result of higher wage costs and lower income from core operations due to a reduction in container vessel arrivals, downward adjustments in tariff charges and debt servicing.
- c. The following will have to be addressed by the government to ensure SPA can function as a profitable Organisation:
  - Direct Short Term Approach: discharge all debt either by the Government of Samoa taking over the commercial loans as sovereign debt or the Government of Samoa refinancing the loans through a government guarantee and limiting SPA debt to a much reduced interest payment position;
  - Medium Term Approach: extend the period of payment to creditors and shorten the period of collecting income, in conjunction with extending the size of the overdraft and line of credit.
- d. The other key planning document in the sub-sector is the SPA Corporate Plan 2013 2015 which highlights the following key strategic issues or programmes for development over the plan period:
  - Relocation of marina to Sogi/Mulinuu;
  - Cruise terminal berth;
  - Dredging Asau, Salelologa, Mulifanua and Aleipata;
  - Apia container park extension and resealing;
  - Apia Port Control Tower;
  - Navigational aids;
  - Tugboat/pilot boat;
  - Reconstruction of breakwater;
  - Mulifanua and Salelologa car-park resealing;
  - Apia old wharf rehabilitation or reconstruction;
  - Fagamalo floating pier.

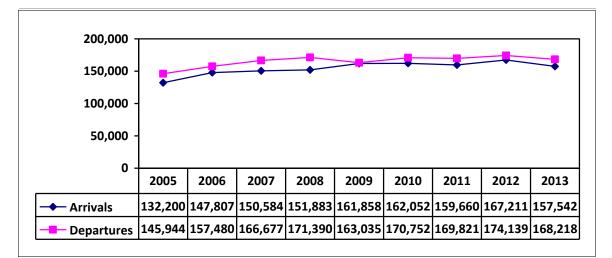
## **1.4 Air Transport Sub-sector**

#### Policy and Regulatory Frameworks

- a. The key players in the air transport sub-sector include MWTI Civil Aviation Division (CAD), Samoa Airport Authority and airlines servicing the transport requirements of passengers and freight into and out of Samoa.
- b. The MOT is the designated Civil Aviation Authority for Samoa under the Civil Aviation Act 1998, a role now assumed by MWTI, after the merger of the MOT and MOW in 2003. The Civil Aviation Division (CAD) of the MWTI is responsible for discharging the CAA usual functions of enforcing the Act and the Civil Aviation Rules and Regulations 2000. CAD is responsible for ensuring that Samoa complies with the requirements of the International Civil Aviation Organisation (ICAO), for enhancing the safety and security of civil aviation operations, activities and development in Samoa as well as for advising on civil aviation policies to ensure compliance with Samoa obligations under ratified international conventions, treaties and agreements.
- c. In accordance with ICAO, each contracting State (MWTI) is responsible for the oversight of its own operators and service providers. For Samoa, this responsibility has been delegated to PASO (Pacific Aviation Safety Office) under a 2008 Service Level Agreement (SLA) for aircraft operations, airworthiness, aerodromes and aviation security. NZCAA under a 1998 Agreement has been delegated the oversight of air navigation services (air traffic services and aeronautical telecommunications) and personnel licensing for air crew. PASO and NZCAA undertakes these oversight work on behalf of the MWTI with the CAD assisting and conducting follow-ups where required.
- d. SAA is a government-owned statutory authority operating under the Samoa Airport Authority Act 2012. The new legislation has provisions to establish, improve, maintain, expand, operate and manage aerodomes and facilities engaged in the civil aviation sub-sector. SAA is considered strategic by the government and is therefore not positioned for privatisation, but commercial functions within the airport are open to outsourcing. The authority currently manages and operates one international airport (Faleolo) and two smaller domestic airports (Maota and Asau) in Savaii.
- e. There are two (2) local air operators licensed (Air Operator Certificate-AOC) by the MWTI, Polynesian Airlines and Samoa Air. Virgin Samoa eventhough issued with an Air Service License (ASL) operates under a NZ AOC conducting scheduled air services to Auckland, Sydney and Brisbane. Polynesian Airlines and Samoa Air conduct air services to American Samoa and domestic services to Savaii. Foreign carriers operating into Samoa and issued with foreign AOCs are, Air NZ, Virgin Australia, Fiji Airways and Inter Island Airways.
  - Air NZ offering direct flights between Samoa and NZ using B767, B777 and A320 aircraft.
  - Fiji Airways (formerly known as Air Pacific) offering direct flights to Fiji and Hawaii on B737-800/700 aircraft.
  - Inter-Island Airways (based in American Samoa) offering chartered direct flights to American Samoa using a Dornier 228 aircraft.

#### Existing Airport Infrastructure & Capacity

- a. There are four airports in Samoa, two on Upolu (Faleolo and Fagalii) and two in Savaii (Maota and Asau). Three of these are owned and managed by the Samoa Airport Authority whereas Fagalii International Airport on the outskirts of Apia is privately owned by Polynesian Airlines. This airline provides international flights to and from American Samoa only and domestic flights to and from Savaii.
- b. The number of passengers arriving through the SAA-operated airports has increased by 14% from 132,200 in 2005 to 157,542 in 2013 as per Figure 7 below. The increase was mainly caused by returning relatives and people who were here on holiday/vacations, with a very small percentage of the increase attributed to people travelling for sports purposes and conferences. The average arrivals per month were 12,979 or an average of 417 passengers arriving at Faleolo International Airport daily.

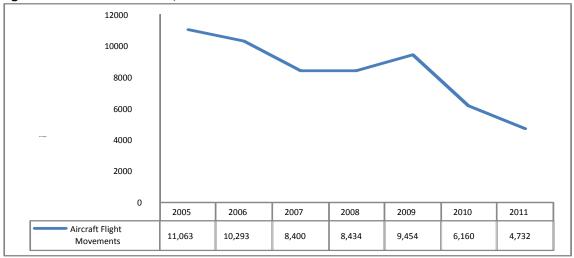


#### Figure 7: Airline Passenger Movement, 2005-2013

#### Source: Samoa Bureau of Statistics

c. An analysis of aircraft movements from 2005 to 2011 indicates a decline of 57% from 11,063 in 2005 to 4,732 in 2011 at Faleolo International Airport shown in **Figure 8**. Reasons given by SAA officials for the decline are the re-opening of Fagalii Airport (and subsequent shift of Polynesian Airlines flights to there) as well as the closure of South Pacific Express Airlines. The slight increase in 2009 was mainly attributed to the flights for the post-tsunami recovery work. It was also noted that although there was a decline in landings, passenger numbers had settled, because airlines were using wider-bodied aircraft. An average of 374 flights landed at Faleolo International Airport per month or approximately 13 flights per day.

Figure 8: Airline Movements, 2005-2011



Source: Samoa Airport Authority

#### Financial Viability and Investments

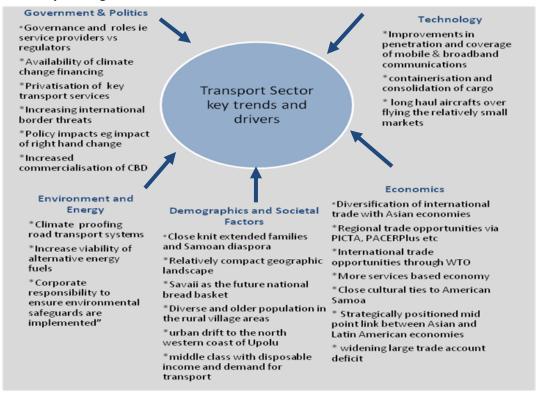
- a. Recent global events have had a significant impact on the financial viability of airports worldwide and Samoa is no exception. Following the perceived rise in the threat of terrorist attacks, the international airports were required to introduce stringent security arrangements which having ongoing costs. Similarly after outbreaks of deadly infectious diseases (SARS, H1N1) were shown to have been spread by airline passengers, airports had to invest in improved health screening and protection measures to limit such spread in future epidemics. The global economic downturn has affected tourist behaviour, which has also had an impact on airport arrivals and income. These global events together created the need for airports to look for alternative revenue streams.
- b. The evolving airport business model has seen a diversification of revenue generating activities undertaken, with a focus on building up non-aeronautical revenues (from a baseline of about 13% of total income in 2009). The expansion of the non-aeronautical revenue base is essential to minimise the impact of future fluctuations in aircraft and passenger movements as a result of global and regional events beyond the control of the authority.
- c. In 2010, the Samoa Airport Authority developed a 20 year Master Plan 2010-2030 to forecast aircraft and passenger movements with a focus on Faleolo International as the key point of entry and a five-year Business Plan 2010-2015 to implement priority investments.
- d. The implementation of these key initiatives is through the rolling SAA Corporate Plan 2013 2015 which is updated on annual basis. Based on discussions with key stakeholders the developments which will be prioritised over the sector plan period include the following:
  - Feasibility study for Aleipata airstrip;
  - Samoa Aviation Project at Faleolo, to be funded by the World Bank and estimated to costUS\$27 million, focusing on improved safety (apron, runway upgrade/resealing, procurement of fire service trucks);

- A proposal to Japan for an upgrade of Faleolo airport terminal including the installation of aerobridge(s);
- Possible shift of aircraft fuelling storage facilities further away from the apron area to improve safety;
- Continuation of upgrading of all terminal facilities and increasing utilisation by private sector service providers, for income generation purposes.
- e. These projects will improve service delivery to air transport users and SAA's on-going compliance with applicable international regulations and standards. SAA expects to continue to fulfill its community service obligations through the provision of rescue/fire services for off airport emergencies in neighbouring villages and by continuing to operate the unprofitable Maota and Asau airports.

# **Chapter 2: Sector Trends and Challenges**

#### 2.1 Key trends and drivers in the sector

- a. Stakeholder consultations and the document review revealed a number of current and emerging trends and forces likely to influence the development goals and performance of the transport sector. These influences require careful consideration when formulating a longer term pathway to deal with the expected strong demand on the country's transport infrastructure and utilities as Samoa's economy becomes increasingly integrated with the global economy through regional and international economic, trade and security agreements.
- b. Some of these influences can be factored into the outcomes and strategies under the selected key priority areas for the period 2014 2019. For example, it is possible to anticipate that a rise in the size of a middle class with greater disposable income will drive the development of smaller commercial or business centres in "suburban" Apia and other parts of Upolu and Savaii, which will result in increased commuting traffic volumes and goods distribution vehicles. Setting the right policy platform for increasing public-private partnerships in the management and operations of key transport services, monitoring continuing urban drift and changing consumer preferences, and responding to public expectations arising from improved social and economic positioning will be essential during the plan period.
- c. Current and emerging trends affecting the transport sector are summarised in **Figure 9** in five broad groupings in an attempt to capture the areas of influence and their impacts.



#### Figure 9: Key Strategic Trends and Drivers

# 2.2 Improving, Sustaining & Climate-Proofing Road Transport Network

#### Funding and Commercial Viability

- a. Funding for road construction and maintenance will present a major challenge to the public sector, particularly given the budget constraints imposed by the requirements for debt service payments. It will be important to explore further opportunities for private sector participation and cost recovery through user-pays fees in the construction of new roads (e.g. through fuel levies), as recommended in the Second Infrastructure Asset Management Project (SIAM-2).
- b. How the revenue generated from fuel surcharges is allocated must be resolved with the Ministry of Finance (MOF). The current annual budget allocation to LTA through the MOF budget is insufficient to support the climate-proofing of the road network and to sustain the required maintenance of the current road network. It is estimated that LTA needs an annual budget of \$45 million to meet the public's expectations. This amount would be additional to the counterpart funding the government is obligated to provide for donor-funded capital projects.
- c. The annual increase in the number of vehicles being imported into Samoa is a growing concern, as the road network has limited capacity to handle larger volumes of traffic, especially at peak commuting times. A review of the current policy relating to the importation of vehicles, with a view to introducing mechanisms to cap the size of the total vehicle fleet, is an urgent priority. Since Samoa's accession to the World Trade Organisation (WTO) in 2011, restrictions on importing left-hand drive vehicles have had to be lifted. Furthermore, the restriction on importing vehicles over a certain age is also prohibited under WTO rules. Samoa must consider introducing a motor vehicle import policy based on technical assessments (for example, vehicle emission limits), or which impose progressively prohibitive vehicle-age related import taxes.

#### Construction and Maintenance of Road Network

- a. Over the long term the size of Samoa's sealed road network will have to be decreased as Samoa does not have the financial resources to maintain the entire existing network to a high standard. Road maintenance will have to be prioritised based on economic and social criteria, including consideration of the relative costs and benefits of national, local and access road networks. The present approach to road repairs is that, instead of regular and planned maintenance, priority is given to patching failed areas that have been previously patched. This is not sustainable and does not address the fundamental causes of road failure. Proper routine preventative road maintenance reduces vehicle operating costs for public, private and commercial vehicle owners, so it is important that Government prioritises the sustainable funding of the LTA annual road maintenance programme.
- b. MWTI in its regulatory role continue to perform regular monitoring inspections of all public assets which include contructions and maintenance of road networks. This will ensure that the quality of roads are sustain and would meet relevant standards in accordance with the Government guidelines and procedures.
- c. The capacity of LTA to manage road maintenance and construction contracts and to provide effective supervision of the performance of contractors needs strengthening. This will improve road maintenance and construction standards. The capabilities of contractors and service

providers also need strengthening, through training workshops conducted by LTA and other relevant agencies such as MNRE.

- d. There is a need to climate-proof the road network to improve climate resilience. Generally, this component has not been considered in the design of most roads in Samoa. However, with increasing awareness of climate change impacts and the worldwide promotion of adaptation and mitigation tools for climate resilience, this element is slowly being incorporated into land transport planning principles and policies. It is vital to conduct a study on how to best climate-proof roads in Samoa and to put forward a recommended programme for implementation. It is equally important to survey and gazette all roads in Samoa to update the LTA asset register so that accurate baseline information exists.
- e. Further development of the Samoa Economic Transport Corridor is one of the main concerns cited by stakeholders. The widening of Vaitele Street to four lanes past the Vaitele Industrial area, the reinstatement of the Vaisigano and Leone Bridges to normal capacity.

#### Non-Motorised Travel and Public Transport

- a. Generally, apart from small parts of urban and suburban Apia, Samoa's road network does not cater for pedestrians and bicycles. When roads are being redesigned or rebuilt, those known to have high levels of foot and cycle traffic should incorporate improved road safety and access, by providing better pedestrian facilities and cycle lanes where possible. These include safer footpaths for the elderly, young children and people with mobility disabilities, and traffic calming devices such as speed bumps, pedestrian crossings, roundabouts and traffic islands.
- b. Bus and taxi services are provided by private operators. There is a need for more robust bus and taxi licensing systems, which spell out the terms and conditions of licences. Alongside that there is a need for greater compliance monitoring and sanctions for non-compliance.
- c. Traffic congestion in urban and suburban Apia and on the main coast road to Mulifanua at peak hours needs to be addressed. Over this plan period it will be necessary for Samoa to introduce measures to improve the efficiency of road transport movements, including controlling the numbers of imported vehicles, redirecting heavy traffic away from narrow roads with high pedestrian counts, increasing the use of taxi ranks and bus-stops, the careful scheduling of road maintenance works and improving parking options in Apia township.

#### **Road Safety and Access**

a. Road safety represents an important aspect of a sustainable land transport system. Currently no reliable statistics are available about injuries or hospital admissions relating to road accidents or about road deaths, but the perception is that they are on the rise. It would be helpful to strengthen the data collection and sharing of such statistics by Ministry of Police and Prisons, Accident Compensation Corporation and the National Health Services, to identify particularly dangerous locations and types of vehicles.LTA will need to invest more resources in improving the safety of all vehicles, in changing driver and pedestrian attitudes and behaviour and in raising public awareness of the tragic consequences of serious road accidents.

- b. The National Road Safety Committee (NRSC) is chaired by MWTI. Its members have been approved by Cabinet which comprises of Government Ministries and Authorities as well as Non Government Organisations. One of the functions of NRSC is to develop and approve programs of education and public awareness related to issues of road safety.
- c. LTA estimated that up to 30% of vehicles using rural roads are unregistered, putting not only their drivers and passengers but also other road users at risk because the safety features of the vehicles (tyre tread, brakes, lights and indicators, seat belts etc) are sub-standard. It may be necessary to look at ways of encouraging rural vehicle owners to re-register their vehicles, which would require them to make their vehicles safer.

# 2.3 Improving Safety, Security and Competitiveness of Maritime Services

#### Safety and Security Systems

- a. Safety is a major concern for maritime transport, including the need to address and monitor compliance with international and local safety standards. Budgets must allow for the maintenance of life-saving and fire-fighting equipment of the required quality and quantity on passenger vessels and crew must be well-trained in how to deal with emergencies at sea. There is also a need to raise awareness among fishermen who go beyond the reef of the importance of checking weather forecasts, ensuring their alia is sound, not overloading their ship and of having adequate flotation devices for use in an emergency.
- b. In addition the maritime sub-sector needs to maintain its compliance with international border security requirements, not only to protect Samoa from those with criminal intent, but also to protect its biodiversity from potentially devastating introduced botanical, insect and reptile "stowaways". If front-line SPA and SSC staff members have any concerns about arriving passengers or cargo, they should take responsibility for helping to protect our borders by bringing their concerns to the attention of customs and quarantine officers.
- c. Maritime facilities are highly vulnerable to extreme wind and rain due to the obviously exposed locations of ports and their associated vessels, buildings, vehicles, and equipment. Samoa needs to increase its investment in protection of these strategic assets which, as became apparent in 2009 and 2012, become key pathways for relief and recovery assistance after a natural disaster.

#### **Operational Efficiency and Financial Viability**

- a. The current challenge faced by SPA is to strengthen its financial performance. This will require a re-examination of its business model to identify opportunities for reducing costs and increasing revenues. A review of current port fees and charges for stevedoring, marina berths, and domestic freight movements is necessary, to ensure they are set at commercially appropriate levels.
- b. Except at peak sailings during public holiday weekends the revenue received from passenger fares and vehicle transfer charges do not cover the costs of providing the ferry service between Upolu and Savaii. But because both SPA and SSC are monopolies, market forces cannot be allowed to dictate their fee structures. If SSC were to raise the vehicle and passenger fares to the levels needed to cover costs, it would cause real hardship, especially for residents of Savaii

with lower household incomes. It would also have a dramatic impact on the social and economic development of the country generally, because of the key role played by the inter-island movement of goods and services. The government (through the Ministry of Finance) needs to determine what level of cross-subsidy to SPA and SSC is required for the long-term financial viability of both organisations.

c. With regard to the financing of capital assets in the longer-term, a vessel replacement fund has been established, and the budget allows for 10% average annual growth of amounts put into the fund. The fund is invested where good but secure rates of return are offered (such as UTOS, which is offering 5% interest currently).

#### International Trade

- a. Samoa has made a significant investment in the infrastructure at the Apia international port and the domestic ports including the Aleipata wharf and slipway. There is some potential for Samoa to increase its role as a sub-regional hub trading with the neighbouring islands of American Samoa, Cook Islands, Niue, Tonga, Tokelau, and Tuvalu. During the plan period a study should be undertaken to look at the scope of trade opportunities and the facilities needed to support them.
- b. During certain times of the year access to the Apia harbour is challenging because of the swell, which may constrain the potential to grow as a regional or sub-regional port. The TSP suggests conducting a feasibility study for an alternative location for the main international port, such as Vaiusu Bay. With Vaiusu's proximity to the Vaitele industrial area, one of the benefits of that location would be to remove the heavy containerised through-traffic from urban Apia.

# 2.4 Upgrade Capacity and Safety of Air Transport

#### Funding and Commercial Viability

a. The strategy of trying to increase airport income by increasing non-aeronatical revenues should continue. Providing attractive, affordable spaces for lease, in terminals, for suitable businesses enhances the public's travel experience and adds to SAA's income streams. Efforts should continue also to try and increase air routes by attracting new airlines to Samoa. Singapore Airlines have already indicated an interest in signing a bilateral agreement. The burgeoning Chinese tourism market provides an outstanding opportunity for SAA. The location of Samoa halfway between the east coast of China and the west coast South America makes it a logical stop-over for future trans-Pacific routes currently being developed.

#### International Air Transport Infrastructure and Climate-proofing

a. The international air transport infrastructure in Samoa meets current needs but should be upgraded and expanded to continue to comply with international safety and security standards and to allow for future growth. Key investment areas at Faleolo International Airport on the safety and security compliance side include the upgrading of the runway and apron, airfield lighting, regional navigation and communication technologies and air traffic control. There is also a need to ensure that all airlines providing services in Samoa meet strict international certification as well as safety and security requirements.

b. As with the international seaport at Apia, the high vulnerability of the international airport at Faleolo to extreme weather due to its exposed low-lying coastal location makes it urgent for Samoa find ways to protect this strategic asset.

#### Domestic Air Transport Infrastructure and Services Upgrade

- a. The main challenges for the domestic air transport system will remain the maintenance of existing infrastructure and services at Fagalii, Maota and Asau, and funding the major proposed project the Aleipata Airstrip. The major domestic air transport providers, Polynesian Airlines and Samoa Air, need to continue to identify niche cargo or passenger requirements so that each business can continue to prosper by avoiding competing directly for the same customers.
- b. A comprehensive audit of all three domestic airports, to ensure that they continue to meet international safety and security standards, is also essential.

#### 2.5 Strengthen Transport Sector Governance Framework

#### Legislative, Regulatory and Institutional Framework

- a. The proposed Amendment to the MOW Act 2002 and possibly 2007 LTA Act may clarify the role of the Ministry as the prime regulator for land transport. The LTA also regulates its customers in accordance with its legislated functions. Amendments to the Civil Aviation Act 1998 are also in the pipeline, aimed at updating the Act and strengthening the Ministry's oversight of civil aviation activities in Samoa. The MWTI's Planning and Policy Division (PPD) must ensure all sector developments are in compliance with relevant Government policies and regulations related to the environment. This can be done by close cooperation between MWTI, MNRE, LTA, SPA, SSC, and SAA.
- b. Ports Authority legislation needs to be updated to incorporate regional and international obligations as well as transport-related sectors such as Economic (Tourism and Agriculture), Infrastructure (ICT), Social (Border Security and Social Cohesion) and Environment (Climate and Disaster Resilience).
- c. There is a need to re-assess whether the Asset Management Building Division should remain with the MWTI or be merged with the functions of the MNRE's Planning and Urban Management Agency (PUMA). The current provision under the MOW Act 2002 relating to the Asset Management Building functions may also need to be reviewed. The proposed Transport Sector Coordination Unit within MWTI could stand alone or could be part of the Planning and Policy Division (PPD). However, MWTI must address the limited capacity and resources of the current PPD to undertake the monitoring and implementation of the TSP.
- d. The motor vehicle import policy is a part of the regulatory framework that desperately needs review. The policy has seen a significant increase in the number of new and used motor vehicles since Samoa switch to driving on the left in 2009. The number of vehicles certified fit to operate on the island's roadways during 2008 was 8,064 an increase of 103 percent compared with 2012 which recorded a total of 16,396 vehicles registered. While the increased number of vehicles has enhanced mobility and convenience for citizens, the economic and environmental costs of importing, maintaining, fuelling and ultimately disposing of such a fleet if it continues to grow at

the same rate are worrying. The Transport Sector Plan needs to find other ways to meet public demand for mobility and convenience (for example through a reliable, comfortable and affordable public transport system).

#### Capacity and Resource Building

- a. There is a shortage of qualified and experienced engineering/technical staff as well as financial and planning expertise in all key sector agencies, which affects their capacity to deliver core services and functions. Only by offering competitive salaries to public servants with the required qualifications, skills and experience can this shortage be remedied. Similarly there is also a real need for capacity building of private contractors and service providers in the sector and it is in the interests of the government to provide that up-skilling.
- b. There is no database which stores information relevant to the transport sector as a whole, or even in any of the transport sub-sectors. Neither is there an electronic register of governmentowned transport sector assets. This means there is ability to collect and store basic data to guide policy decision making, monitor or evaluate transport sector performance or to track compliance with international obligations. This information vacuum must be addressed as a priority.

# 2.6 Environmentally Sustainable, Energy Efficient and Socially Responsible Transport Sector

#### Environmental Sustainability

- a. A sustainable transport system is one that:
  - meets the access and development needs of individuals, companies and society safely;
  - is affordable, operates fairly and efficiently, offers a choice of transport mode, and supports a competitive economy;
  - minimises the impact on the use of land and the generation of noise;
  - limits emissions and waste within the environment's ability to absorb them;
  - uses renewable resources at or below their rates of generation;
  - uses non-renewable resources at or below the rates of development of renewable substitutes; and
  - promotes equity currently and for future generations.
- b. The real purpose of transport is access to work, goods and services, education, health services, friends and family and so on and there are techniques to improve access which are environmentally sustainable. Up until now the absence of a Transport Sector Plan has meant a fragmented approach to sustainability issues through the development of Samoa's transport infrastructure the focus has been on a project by project basis without a holistic overview of the impact across the sector and others. This first TSP provides an opportunity to try and minimise the negative impacts on the land, the air, and the sea, of goods and people moving through them.
- c. The main environmental impacts of land transport are air and noise pollution. During the dry season dust is dispersed into the air by tyres (even on sealed roads) which ends up going into everyone's lungs, while levels of vehicle  $CO_2$  emissions are high because to the age and fuel-

inefficiency of the existing vehicle fleet. Those living close to roads in the Apia urban area and main Economic Corridor from the West Coast Road to Vaitele Street are most affected. Other serious environmental impacts arising from land transport relate to the disposal of vehicles, parts and tyres at the end of their economic life. The TSP proposes to attempt to manage the number and age of vehicles imported, to reduce these impacts.

- d. Maritime transport impacts adversely on the marine environment through pollution of the coast, the inter-island channel and the port areas, through leakage of oil and hazardous substances, diesel engine emissions from ships affecting air quality, and careless disposal of rubbish by passengers and crew. SSC can help by ensuring regular engine maintenance occurs to reduce pollutants and, when leaks are noticed, by arranging for timely repairs. The corporation also needs to find ways that allow ferry crews to communicate their own respect for the sea and marine life, by discouraging passengers from throwing trash (especially plastics) overboard.
- e. The air transport sector in Samoa cannot easily mitigate its main negative impact on the environment air pollution. However reducing the number of individual vehicles travelling from Apia to Faleolo to meet flights, perhaps by offering a subsidised passenger shuttle service, could be one contribution the sector could make.

#### Energy Efficiency

- a. There is no disputing that a key driver for Samoa's developing economy is an efficient land, sea and air transport system that moves people, services and goods domestically and internationally. Equally irrefutable is the fact that Samoa's existing transport sub-sectors use fossil fuels almost exclusively. Fossil fuel reserves are running out rapidly – optimistic predictions forecast that oil production will begin to decline around 2020, pessimistic predictions are that the decline has already begun. The more expensive techniques needed to extract and process the remaining heavier, deeper crude oils will undoubtedly be passed on as price rises for Samoan consumers, transport service providers and businesses generally.
- b. The price for petroleum in Samoa is relatively low in comparison to other parts of the region due mainly to the Government policy for one supplier of oil imports. In 1998, the Government adopted a one supplier system whereby all of the country's oil imports and distribution were handled exclusively by a single operator (or a team working in a joint venture) that was granted a contract for five years. However this structure can only keep prices as low as world market fluctuations in crude prices allow. Higher levels of consumption coupled with rising prices have pushed the value of oil imports to an all time high. Strong growth in Samoa's transportation sector is a major reason that petroleum consumption has been increasing and will continue to do so.
- c. In 2010 petroleum consumption totaled at 90.9 million litres, seeing an increase of 5.9 percent from 2009 (88.2 million litres). By sector, the transport sector consumed 67.9 percent of total petroleum consumption, accounting for 60.6 million litres of fuel, recording a decrease of 1.2 percent from 2009. The electricity sector consumed 20.8 percent of total consumption accounting for 18.95 million litres of fuel for electricity generation, an increase by 5.9 percent from 2009. The remaining 12.5 percent of fuel consumption is accounted mainly to the commercial and residential sectors. Efficiency and conservation strategies will help to ease the

burden of rising oil prices in the short term and the development of alternative fuels such as coconut oil are expected to reduce petroleum dependence and its negative economic consequences in the long run.

- d. A future-looking Transport Sector Plan needs to acknowledge the reality that it is highly likely that the direct costs of transport (diesel, petrol and aviation fuel) will increase steadily over the plan period, as will indirect costs (for example road-building costs, as tar is a petroleum by-product). Energy is consumed in the manufacture (as well as the use) of vehicles, ships and planes, and in transport infrastructure, so rises in oil prices will affect all parts of the transport sector, and the transport cost rises will be passed on to consumers through hikes in the prices of all goods and services.
- e. Samoa has limited ability to influence its overall transport-related energy consumption because of the economy's reliance on imported goods and tourism and its distance from where those goods are manufactured and tourists are coming from. Nevertheless the land transport subsector should seek ways to encourage the use of more energy-efficient transport modes (eg buses, walking, cycling and horses) and discourage the use of taxis and private cars. All branches of the government should seek cost effective ways to decentralise delivery of key services, to reduce the number of journeys rural residents have to make to Apia and Salelologa. The development of School Net has the potential to increase the possibility for rural communities to use information and communications technologies to receive government services, instead of having to travel to town. Government should also encourage private businesses to open branches on the south coast of Upolu and the north coast of Savaii, thus making it easier for rural communities to access the goods they need locally or at least nearer to where they live.

#### Social Responsibility

- a. Road connectivity enables better access to basic services such as schools and healthcare facilities and improves the quality of life. This is inline with recent assessment of Samoa's progress towards achieving the Millennium Development Goals which recent statistics indicates poverty has fallen faster than the targeted rate, universal primary education has almost been achieved, gender disparity in primary and secondary education has been eliminated, and child and maternal mortality has been reduced. The country is also on track to achieve the Millennium Development Goal of environmental sustainability.
- b. The demand for public transport such as air travel, buses and taxis is currently measured by SBS through the Transport Index (TI)<sup>11</sup>. Based on the July 2013 CPI, the increased prices recorded for fuel (petrol and diesel) and airline fare (Apia-Auckland-Apia) resulted in the 2.4 percent increase in the Transport Index. The sector needs to ensure transport services are monitored and affordable for all especially those in vulnerable areas.
- c. The frequency of visits by Government agencies to rural areas has increased given the improved road connectivity and has led to an improvement in the implementation of various development schemes and programmes. Improvements in road infrastructure also has positive spillovers on other basic facilities. For instance, with better quality roads, water supply and sanitation has

<sup>&</sup>lt;sup>11</sup>The TI is a component of the Consumer Price Index (CPI) which is measured on a monthly basis.

improved. Villages now have access to better postal services and banking facilities. Connectivity has exposed villagers to modern technology such as mobile telephones and televisions. There has also been a boom in construction of homes and churches since accessibility to and transportation of raw materials have become easier. Areas connected by roads can respond better to emergency situations (fire, drought, floods, etc.). Prior to road improvements, cyclone's cut off many villages but now they have access to emergency facilities.

d. One of the key opportunities offered by an integrated Transport Sector Plan overseen by a Transport Sector Coordination Unit is the development of improved connectivity between the three sub-sectors. The possibility of synchronising international flight arrival and departure times with inter-island ferry timetables is one example. Another could be an effort to improve logistics management systems so that each truck leaves the international port fully-loaded and makes the minimum number of journeys to and from the port. There should be a concerted effort to minimise the number of individual heavy vehicle journeys west, east, north and south from the ports of Apia and Salelologa. This not only makes economic sense for the freight distribution companies, it would ease traffic congestion in the urban areas and be good for the environment.

# Appendix 1: List of Key References

# National Legislation

Name	Year	Agency/Author
Public Finance Management Act	2001	MOF
Civil Aviation Act	1998	MWTI
Public Drains Regulations	2007	MWTI
Shipping Act	1998	
Land Transport Authority Act	2007	MWTI/LTA
Ministry of Works Act.	2002	MWTI
Public Bodies (Transparency and Accountability) Act and Amendments	2001, May 2011, Nov 2011, 2012	MOF

# National Policies and Plans

Name	Year	Agency/Author
National Plans	I	
Public Sector Investment Plan	2012-2015	MOF
Strategy for the Development of Samoa	2012-2016	MOF
Strategy for the Development of Samoa	2008-2012	MOF
Transport Issues Paper	2011	MOF
National Infrastructure Strategic Plan	2011	MWTI
Sector Plans		
Sector Planning Guidelines	2009	MOF
Water Sector Plan	2012-2016	MNRE
Community Sector Plan	2010-2015	MWCSD

Corporate Plans		
Land Transport Authority	2013-2015	LTA
Ministry of Works, Transport & Infrastructure	2013-2015	MWTI
Samoa Ports Authority	2013-2015	SPA
Samoa Airport Authority	2013-2015	SAA
Samoa Shipping Corporation	2013-2015	SSC
Samoa Airport Authority Business Plan 2010-2015	2010	McCormicRankinCa gney &KVAConsult

# Project Reports

Name	Year	Agency/Author
SIAM Phase 2	2008	MOF

# Appendix 2: List of Key Persons Consulted

## Focus Group Consultations July-August 2013

	Name	Position	Organisation
1	Vaaelua Nofo Vaaelua	CEO	MWTI
2	Leota K Perelini	ACEO-Land Transport Division	MWTI
3	Nanai J Saaga	ACEO-Civil Aviation	MWTI
4	Faleniu Alesana	ACEO-Maritime	MWTI
5	Paulino Pania	ACEO-Policy & Planning	MWTI
6	Faamaini Vaa	ACEO-Corporate Services	MWTI
7	Emanuelu Lesatele	Principal HR Officer	MWTI
8	Ausetalia Tanuvasa	Principal Civil Aviation	MWTI
9	Mose Mosile	Principal Accountant	MWTI
10	Makerita Aiono	Senior Surveyor	MWTI
11	Alefosio Senio	Internal Auditor	MWTI
12	Yvonne T. Mariner-Viliamu	Principal Civil Aviation Officer	MWTI
13	Foketi Fuimaono	Policy & Planning Officer	MWTI
14	Elizabeth P O Toomata – Fiti	LTD	MWTI
15	Robert Bartley	LTD	MWTI
16	Lisabella Ropati	LTD	MWTI
17	Leasi Galuvao	CEO	LTA
18	Sinapati Ulberg	ACEO-Procurement & Planning	LTA
19	Magele Hoe Viali	CEO	SAA
20	Tufuga Fagaloa Tufuga	General Manager	SPA
21	Seinafolava L. Tomane	Port Master	SPA
22	Mautanoa M. Tanuvasa	Manager Audits	SPA
23	Tuaiaufai A. Tuimauga	Manager Ports Operations	SPA
24	Papalii Willie Nansen	General Manager	SSC
25	Leiataua Samuel D. Phineas	ACEO-Operations	SSC
26	Sooalo Kuresa Sooalo	ACEO-Finance	SSC

# Public Consultations: Thursday 7<sup>th</sup>August 2013

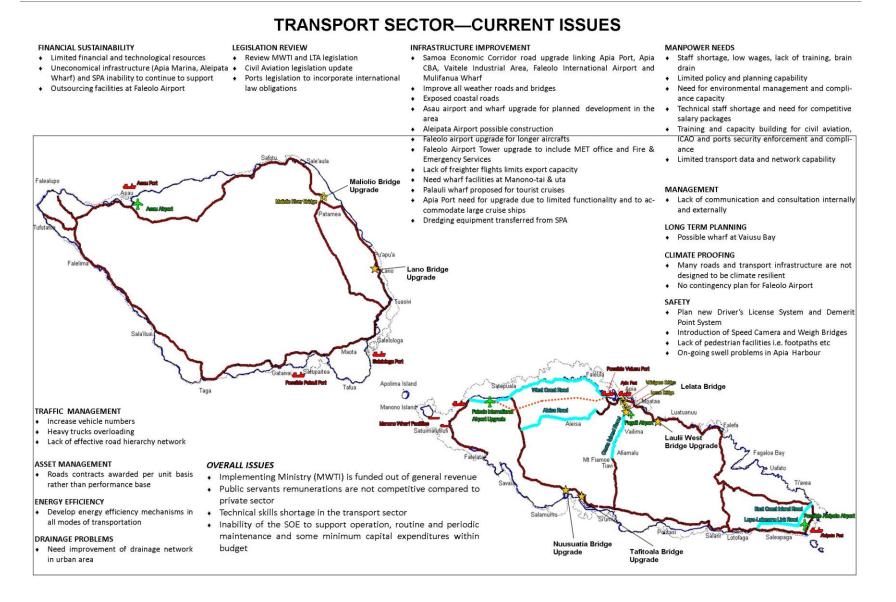
No.	Name	Organisation
1	Kuki Sagale	Alnima Motors
2	Nathan Ryan	Apia Haulage
3	Annabel Eager	Chamber of Commerce and Industry
4	Osana Liki	Chamber of Commerce and Industry
5	Pao Jenny Samania	DB Taxi Stand
6	Tauleuleu Tiotio	Electric Power Corporation
7	Bryan Wareing	Ford Samoa
8	Faumuina W Fong	Freight Plus
9	George M Meredith	George Meredith and Associates
10	Sosene Meredith	George Meredith and Associates
11	Maria Samau	Graeva Enterprises
12	Isikuki Punivalu	IPA Associates
13	Epa Tuioti	KVA Consult
14	Nadia Meredith-Hunt	KVAConsult
15	Rose Williams	Law reform
16	Roy Lee	Lee Transport
17	Seimaleula Sinapati Ulberg	LTA
18	T T Leo Bartley	LTA
19	James Tamasese	Lucky Construction
20	Salote Meredith	Ministry of Commerce, Industry and Labour
21	Gitta Faafeao Lopu	Ministry of Communications, Information and Technology
22	Garina T Stowers	MNRE
23	Josephine Stowers	MNRE
24	Jude Kohlhase	MNRE
25	Lillian Penaia	MNRE
		1

No.	Name	Organisation
26	Malaki lakopo	MNRE
27	Muliagatele Filomena Nelson	MNRE
28	Pauline Pogi	MNRE
29	Salo Sagato Tuiafisi	MNRE
30	Suluimalo Anetaga	MNRE
31	Tuiolo Schuster	MNRE
32	Elita Tooala	MOF
33	Faafetai Galuvale	MOF
34	Hesea Lauaina	MOF
35	Leiataua Henry Ah Ching	MOF
36	Maliliga S Vasa	MOF
37	Michael Kapisi	MOF
38	Paula	MOF
39	SioneFolialii	MOF
40	Shamila Leavai	Ministry of Policeand Prisons
41	Rosa Siaoa	Ministry of Women, Community and Social Development
42	Elsa Fruean	MWTI
43	Erna Lesatele	MWTI
44	Faamaini Fotu Vaa	MWTI
45	Leota Kapeneta Perelini	MWTI
46	Makerita Atonio	MWTI
47	Mose Mosile	MWTI
48	Muliagatele Paulino Pania	MWTI
49	Nanai Junior Saaga	MWTI
50	Quaver Epati	MWTI
51	Tafaigata Toilolo	MWTI
52	Tapaga Collins	MWTI

No.	Name	Organisation
53	Tuilaepa Faleniu Alesana	MWTI
54	Tofilau Gebauer	Nadatas Filming & Marketing
55	TuamanuTavita	National Carriers Ltd
56	LeitufiaFatuLafoai	National University of Samoa
57	Alfred Betham	Ott Transport
58	Misa Henry	Pacific Freight
59	Jeffrey Hunter	Polynesian Airlines
60	Faumuina H Yandall	Private Bus Owner
61	Magele Hoe Viali	SAA
62	Vai Palepua Solaese	SAA
63	Tumanuvao Evile Falefatu	SAA
64	Ueta Solomona Junior	SAA
65	Chris Langton	Samoa Air
66	Veli Lalogafau	Samoa Fire and Emergency Services
67	Anna Aiolupotea	Silva Transport
68	Sala Leslie Silva	Silva Transport
69	Peseta Ma ArasiTiotio	Samoa Land Corporation
70	Capt Herman Overhoff	SPA
71	Mautanoa M Tanuvasa	SPA
72	Leiataua Samuel D Phineas	SSC
73	Sooalo Roger Stanley	STA
74	Fiti	SWA
75	Fuamatuuga Tavae	SWA
76	Tafale Sisvaii	Samoa Works & Engineering Ltd
77	Lyn Netzler	T&L Netzler
78	Esitone Faletagalou	Toga Aasa Taxi Stand
79	Richard Epa	Transam Samoa Ltd

No.	Name	Organisation
80	Elisabeth T Samia	Virgin/Oceania

## **Appendix 3: Summary Map of Key Issues**



Authority	Legislative basis	Function
Ministry of Work	s, Transport & Infrastructure	
All Divisions	<ul> <li>The key mandate for the MWTI is set out in Section 4 of the Ministry of Transport Act of 1978.</li> <li>Other key legislation and regulations include: <ul> <li>Land Transport Authority Act 2007;</li> <li>Ministry of Works Act 2002;</li> <li>Civil Aviation Act 1998;</li> <li>Shipping Act 1998;</li> <li>Public Drains Regulations 2007;</li> <li>Ministerial and Department Arrangements Act 2003;</li> <li>Public Finance Management Act 2001;</li> <li>Public Bodies Act 2001;</li> <li>Public Service Act 2004;</li> <li>Crimes Ordinance 1961;</li> <li>Public Service Regulations 1979.</li> </ul> </li> </ul>	Lead implementing agency for the transport sector. Originally, MWTI <sup>12</sup> was responsible for all forms of transportation and its regulations, however following the Parliament's approval of the Land Transport Bill in March 2007.
Civil Aviation Division		<ul> <li>The scope of the Division's aviation responsibilities covers: <ul> <li>Air Operations;</li> <li>Aircraft Maintenance &amp; Airworthiness;</li> <li>Maintenance Organisations;</li> <li>Aerodrome Standards &amp; Rescue Fire Services;</li> <li>Aviation and Airline Security;</li> <li>Air Traffic Services;</li> <li>Airport Telecommunication;</li> <li>Supply Organisations;</li> <li>Personnel Licensing;</li> <li>Air Services Agreements Compliance;</li> <li>Issue of Air Services Licences;</li> <li>Aircraft Register;</li> <li>Issue of Civil Aviation Certificates;</li> <li>Validation of Foreign Pilots, Aircraft Engineering and Air Traffic Services</li> </ul> </li> </ul>

### **Appendix 4: Detailed List of Implementing Agencies Functions**

<sup>&</sup>lt;sup>12</sup>Prior to the restructuring of the public sector in 2003, the MWTI was originally Ministry of Transport and Ministry of Works (two separate entities). Upon its establishment in May 2003, the MWTI incorporated activities of both ministries as well as some functions under the Ministry of Police and Prisons.

Authority	Legislative basis	Function
Maritime Division	<ul> <li>Shipping Act 1998</li> <li>Other key legislation and regulations: <ul> <li>Marine Pollution Prevention Act 2008;</li> <li>Maritime Security Regulations 2004;</li> <li>Shipping Registration Regulation 2001;</li> <li>STCW Regulation 1998;</li> <li>ISM Regulations 1998;</li> <li>Small Vessel Regulation 1998.</li> </ul> </li> </ul>	Licences; • Regulation of arrival of transit aircraft at Samoa airports. The scope of the Maritime Division's responsibilities includes: • Ship Registration; • Ship Surveying and Inspection; • Ship Surveying and Inspection; • Ship Safety Clearances; • Seafarers' Employment Contracts; • Security Assessment of Port Facilities and Ships; • Audit of Ports and Ships; • Audit of Ports and Ships; • Audit of Ports and Ships; • Audit Maritime Training institution; • Flag State, Coastal State and Port State Implementation; • Technical Advice on International Conventions and National Maritime Legislation; • Monitor Compliance with International Conventions and National Legislation. To ensure that all land transport infrastructures are safe for all road users and that the land transport infrastructures system meets the demands of economic development, and
		are in harmony with the natural environment. In addition, ensure satisfactory levels of public transport facilities.
Policy and Planning Division		Established in 2012, the new division is responsible for all the policy formulation and planning aspects and would drive the research, analysis, compilation and timeliness of all finalised plans.

Authority	Legislative basis	Function
Land Transport A	uthority	
All Divisions	Public Bodies Act 2001 Land Transport Act 2009 <sup>13</sup>	<ul> <li>Prior to its establishment, functions now incorporated with the LTA previously under the jurisdiction of the MWTI include:</li> <li>Inspection of vehicles;</li> <li>Controlling or prohibition of unfit or unsafe vehicles;</li> <li>The maintenance and management of registers;</li> <li>The formulation and implementation of road safety campaigns;</li> <li>Undertaking or commissioning relevant studies and surveys;</li> <li>The effective enforcement of road use laws.</li> </ul>
Samoa Airport Au	ithority	
All Divisions	<ul> <li>Airport Authority Act 1984</li> <li>Public Bodies Act 2001</li> <li>Other legislation and regulations: <ul> <li>Ministry of Transport Act 1978;</li> <li>Civil Aviation Act 1998;</li> <li>Civil Aviation Rules 1998;</li> <li>Civil Aviation International Passenger Charge regulations 1999;</li> <li>Customs Tariff Act 1975 and Customs Act 1977;</li> <li>Liquor Act 1971;</li> <li>VAGST Act 1992/93;</li> <li>Faleolo Road Act 1969;</li> <li>Crimes Ordinance Act 1961;</li> <li>Public Finance Management Act 2001.</li> </ul> </li> </ul>	<ul> <li>The works and functions of the SAA focus around the provision of safe and secure airport services as well as ensuring compliance with international standards. The key responsibility areas of the SAA are:</li> <li>Air Traffic Services and Aerodromes;</li> <li>Aviation Security Services;</li> <li>Works and Technical Services;</li> <li>Corporate Services;</li> <li>Internal Audits and Investigation;</li> <li>Rescue Fire Services.</li> </ul>

<sup>&</sup>lt;sup>13</sup>The Land Transport Authority (LTA) was established in December 2008 following the approval by Parliament of the Land Transport Act in 2007.

Authority	Legislative basis	Function
Samoa Ports Aut	hority	
All Divisions	<ul> <li>Samoa Ports Authority Act 1998</li> <li>Companies Act 2006</li> <li>Other legislation: <ul> <li>Public Finance Management Act 2001;</li> <li>Public Bodies (Performance &amp; Accountability) Act 2001.</li> </ul> </li> </ul>	<ul> <li>SPA core functions include:</li> <li>Provision, management and maintenance of ports;</li> <li>Coordination of all activities within ports and approaches;</li> <li>Regulation of navigation and maintenance of navigation aids within ports and approaches.</li> </ul>
Samoa Shipping (	Corporation	
All Divisions	Companies Act 1955 Samoa Ordinance 1935 Samoa Companies Act 2001 (amended 2006) Other legislation: • Public Finance Management Act 2001; • Public Bodies (Performance & Accountability) Act 2001.	<ul> <li>SSC provides the following key services :</li> <li>Domestic sailing services between Upolu and Savaii;</li> <li>Inter-island services between Samoa and American Samoa;</li> <li>Charter services to key islands included Manua, Tokelau, Swains and Cook Islands;</li> <li>Courier services.</li> </ul>

## Appendix 5: Sector Recurrent Costs

Goal	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Budget Est)	2013-14 (Budget Est)	2014-15 (Forw.Est)	2015-16 (Forw.Est)	Total
MWTI								
No. of Employees	54	53	57	59				59
Total Salaries	1,658,119	2,080,613	2,166,775	1,899,768	1,941,666	1,797,181	1,703,360	13,247,482
Operating Expenses (excl. salaries)	2,143,119	2,191,838	2,298,365	1,792,013	541,782	541,782	541,782	10,050,681
Total Budget	60,585,177	61,395,188	64,177,499	60,555,081	86,662,896	44,901,205	44,804,204	423,081,250
LTA								
No. of Employees	70	83	94	94				94
Total Salaries	1,790,961	2,258,065	2,335,253	2,124,417				8,508,696
Operating Expenses (excl. salaries)	9,194,152	29,333,255	27,075,531	30,628,824				116,231,762
Total Govt Grant	40,747,680	32,250,301	29,410,784	32,753,241	36,000,000	37,000,000		208,162,006
Total Other Income	6,505,589	9,173,757	9,173,757	9,173,757	11,000,000	11,000,000		56,026,860
Total Revenue	47,253,269	41,424,058	41,424,058	41,424,058				171,525,443

Goal	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Budget Est)	2013-14 (Budget Est)	2014-15 (Forw.Est)	2015-16 (Forw.Est)	Total
SAA								
No. of Employees				239				239
Total Salaries	3,568,696	3,747,131	3,934,488	4,209,902				15,460,217
Operating Expenses (excl. salaries)	1,166,151	2,323,979	7,891,076	7,949,968				19,331,174
Total Revenue	9,711,234	9,517,699	9,484,582	9,484,582				38,198,097
SPA								
No. of Employees			167	167				167
Total Salaries	3,325,418	3,735,511	3,770,000	3,770,000	3,920,000	3,998,400	4,078,368	26,597,697
Operating Expenses (excl. salaries)	10,739,118	11,306,432	9,902,200	9,902,200	5,232,419	5,233,406	5,458,497	57,774,272
Total Revenue	14,270,089	14,306,582	11,494,787	11,494,787	9,737,531	10,127,033	10,532,114	81,962,923
SSC								
No. of Employees				157				157
Total Salaries		2,005,194	1,748,256	2,731,714	1,458,964	1,531,912		9,476,040
Operating Expenses (excl. salaries)		2,093,827	3,094,500	4,078,314	4,669,602	4,903,082		18,839,325

Goal	2009-10 (Actual)	2010-11 (Actual)	2011-12 (Actual)	2012-13 (Budget Est)	2013-14 (Budget Est)	2014-15 (Forw.Est)	2015-16 (Forw.Est)	Total
Total Revenue		22,628,321	19,458,800	26,127,200	29,708,144	31,193,551		129,116,016

# Appendix 6: Sector Action Programme Costs

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total			
Goal 1. Streng	Goal 1. Strengthen transport sector governance framework													
1.1 Efficient and effective policy, legislative, regulatory and institutional	1.1.1 Enhance the governance of the sector in accordance with international best practiceand guiding legislations	1.1.1.1 Review key sector agency legislations and policies to rationalise the regulatory and service provision roles.	1. Inter-office collaboration	MWTI/L TA/ SAA/SP A/ AG/MO F	2014-2019	50	50	50	50	50	250			
framework for transport sector	1.2.1 Strengthen coordination and collaboration of sector agencies and relevant partners	1.2.1.1 Formalise the role of the Transport Project Steering Committee as the national TSSC to guide the implementation of the TSP 1.2.1.2 Establish the TSCU within the lead sector agency, MWTI to manage the implementation of the TSP 1.2.1.3 Develop and implement annual monitoring mechansims for the	2. Set up office for Transport Sector Coordination Unit	MWTI	2014	100	100	100	100	100	400			

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
		sector including the MEF and MTEF									
	1.3.1 Enhance sector corporate capacity and management	1.3.1.1 Develop and implement sector- wide training and capacity building programme to identify critical training and capacity needs of the sector	Training programmes for the Sector given by respective agencies	MWTI/L TA/ SAA/SP A/ SSC	2014	20	20	20	20	20	100
Sub-Total						170	170	170	170	170	750
		e-proof road transport	1	1	1	1		1	1		
2.1 Construct and	2.1.1 Improve construction standards and	21.1.1 Implement LTA annual road maintenance	1. LTA annual maintenance contracts	LTA	2014- 2015	10,000	10,000	10,000	10,000	10,000	50,000
maintain road network to acceptable engineering standards	supervision of road transport infrastructure	programme	2. Design, Construction & Supervision of West Coast Road (Vaitele to Mulifanua Wharf)	LTA	2014- 2018	10,400	10,400	10,400	10,400	10,400	52,000
	2.1.2 Increased and sustainable funding for roads	2.1.2.1 Allocate a minimum of \$35m for road maintenance	3. Road maintenance budget	LTA	2013- 2018	35,000	35,000	35,000	35,000	35,000	175,000
	2.1.3 Strengthen the institutional and	2.1.3.1 Strengthen capacity of LTA to	4. Upgrade of bridges for Upolu	LTA	2016- 2017		500	2,000	500		3,000
	private sector capacities and capabilities to	manage contracts and enforce standards for road	and Savaii	LTA	2014- 2016		500	4,000	500		5,000
	develop and maintain the road	construction and maintenance	5. All weather roads programme for Savaii	LTA	2014- 2016	10,000	10,000	10,000	10,000	10,000	50,000

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
	network		6. All weather roads programme for Upolu	LTA	2014- 2017	10,000	10,000	10,000	10,000	10,000	50,000
		2.1.3.2 Outsource all design, construction and supervision works to the private sector	7. Policy decision to be implemented by LTA	LTA	2013- 2018	100	100	100	100	100	500
	2.1.4 Develop appropriate mechanisms for climate-proofing all	2.1.4.1 Survey and gazette all roads on LTA asset register	8. Land compensation fund for road reserve	LTA	Years 1 - 5	10,000	10,000	10,000	10,000	10,000	50,000
	roads to ensure climate resilience	2.1.4.2 Conduct a study of how to climate-proof all main roads in	9. ERAP and climate resilience of West Coast Road Study	LTA	2013- 2015	9,200	9,200				18,400
		Samoa and cost implementation programme	10. Climate resilience of West Coast Road from Atone St to Faleolo Airport	LTA	2014- 2016		9,200	9,200			18,400
2.2 Increased safety and efficiency of road	2.2.1 Review the efficiency of public transport provision by the private sector	2.2.1.1 Monitor performance of private sector service providers	11. Report on consultants' and contractors' performance	LTA	2014- 2018		60				60
transport services	2.2.2 Stage the development of Samoa Economic Transport Corridor	2.2.2.1 Widen Vaitele St into four lanes from Vailoa to Vaitele industrial area	12. Design, construction and supervision of Vaitele St (Vailoa to Atone St)	LTA	2014- 2018		5,750	5,750	5,750	5,750	23,000
		2.2.2.2 Repair Vaisigano Bridge and Leone Bridge to carry heavy containerised traffic	13. Design, construction and supervision of repair of Vaisigano& Leone Bridges	LTA	2014- 2016		3,000	6,000	3,000		12,000

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
		2.2.2.3 Investigate feasibility of Lotosamasoni bridge to improve traffic flow and safety from Matautu to Port to Vaitele St.	14. Undertake feasibility study for design, construction & supervision of Lotosamasoni bridge and access road	LTA	2016- 2018		1,000	4,000	1,000		6,000
2.3 A road transport system which accommoda tes all road users	2.3.1 Develop appropriate provisions for existing and future roads to accommodate non- motorised travel where appropiate	2.3.1.1 Investigate non-motorised solutions for urban roads and implement appropriate measures accordingly	15. Develop goals for construction of footpaths and marking of bicycle lanes	LTA	2014		150				150
		2.3.1.2 Incorporate pedestrian facilities with disabled access into road programmes	16. Promote pedestrian and cyclist road safety programme	LTA	2013- 2018	7,000	7,000	7,000	7,000	7,000	35,000
2.4 Improved manageme nt of traffic on road	2.4.1 Reduce congestion on road network	2.4.1.1 Enforce the use of bus stops and taxi ranks to load and off load passengers	17. Develop enforcement policy	LTA	2014		20				20
network		2.4.1.2 Limit the annual increase in the number of road vehicles	18. Develop politically- acceptable mechanisms to limit the number of vehicles being imported	LTA	2014		20				20
		2.4.1.3 Develop and enforce parking control measures for congested public roads and Apia township	19. Policy formulation and implementation of parking rules in central business district of Apia	LTA	2013- 2018	300	300	300	300	300	1,500

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
	2.4.2 Improve safety on road network	2.4.2.1 Implement and enforce road safety programme	20. Continue with annual Road Safety Programme	LTA	2014- 2019	100	100	100	100	100	500
		2.4.2.2 Implement a system for complete and accurate information about vehicles and driver licences.	21. Database system for vehicle and driver information	LTA	2014	15	15	15	15	15	75
Sub-Total						102,115	122,315	123,865	103,665	98,665	550,625
Goal 3. Impro		y, security and competi		services							
3.1 Improved safety and security systems and compliance for all ports	3.1.1 Improve safety and security systems to comply with international and local standards	3.1.1.1 Conduct a safety audit for all ports to assess compliance with International Maritime Organisation standards	1. Safety audit study	SPA	2016-2018				320		320
and maritime- related services	3.1.2 Strengthen the operational efficiency of SPA	3.1.2.1 Prepare and implement debt rationalisation strategy	2. Cabinet approval of debt rationalisation for SPA	SPA/MO F	2014- 2019	2,000	2,000	2,000	2,000	2,000	10,000
providers		3.1.2.2 Introduce best practice management to SPA	3. Board approval for measures to reform SPA	SPA	2014		400				400
		3.1.2.3 Reform for private sector participation in port services	4. Board approval for measures to reform SPA	SPA	2014		150				150
		3.1.2.4 Prepare Asset Management Strategy Plan	5. Board approval for measures to reform SPA	SPA	2014		150				150

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
		3.1.2.5 Prepare Ports Master Plan to consider critical infrastructure development	6. Board approval for measures to reform SPA	SPA	2015			400			400
3.2 Improved operational efficiency and financial	3.2.1 Build capacity of international port as a sub- regional hub for short-sea services to neighbouring	3.2.1.1 Conduct a feasiblity study to assess the demand for sub-regional short sea services in selected islands	7. Board approval for measures to reform SPA	SPA	2014		150				
performanc e of maritime agencies	islands	3.2.1.2 Conduct a feasibility study for setting up a new Port at Vaiusu Bay in the longer term	8. Cabinet approval to investigate this for future development	SPA	2016		400				400
		3.2.1.3 Conduct a feasibility study to overcome the swell problem at Apia Port	9. Feasibility study and implementation of recommendations	SPA	2014		400	1,667	1,667	1,667	5,400
	3.2.2 Accelerate the growth of vessel replacement fund	3.2.2.1 Increase the annual contribution and minimise investment risk	10.Annual fund for vessels	SSC	2013 - 2018	1,000	1,000	1,000	1,000	1,000	5,000
	3.2.3 Examine the feasibility of merging of government-owned shipping companies to improve efficiency	3.2.3.1 Conduct study on integrated shipping services	11. Study for possible merger of all government shipping services into one entity	MOF/SS S/ PFL/SSC / MWTI/A G	2014			240			240
Sub-Total						3,000	4,650	5,307	4,987	4,667	22,460

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
4.1 Expanded internation al air transport	4.1.1. Maintain compliance with standards and practices applicable to international	4.1.1.1 Conduct peer review and implementation of SAA Masterplan 2010-2030	1. Master Plan approved by Board and start implementation	SAA	2013		5,000	18,000	18,000	18,000	59,000
infrastructu re that meets internation al safety	ctu airports	4.1.1.2 Upgrade Faleolo International Airport facilities to meet international	2. Runway and apron resealing plus security measures upgrade	SAA	2014- 207		5,000	5,000	5,000	5,000	20,000
and security standards		standards t	3. Upgrade of terminal building plus aerobridges	SAA	2015- 2017		2,000	2,000			4,000
			4. Construction of Aleipata Airport	SAA	2014		320				320
4.2 Improved domestic air transport infrastructu	4.2.1 Improve access and safety of domestic airports to meet national safety and security standards.	4.2.1.1 Conduct a safety audit for all domestic airports to assess compliance with national standards	5. Safety audit study	SAA/M WTI	2014		200				200
re and services that meet national safety and security standards		4.2.1.2 Review ownership and management of domestic Airports	6. Cabinet approval of report recommendation to transfer ownership of Fagalii to SAA	Cabinet/ SAA/ Polynesi an Airlines	2013		300	300	300	300	1200
Sub-Total						-	12,820	25,000	23,000	23,000	84,720

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
5.1 Environmen tally sustainable, energy efficient and socially responsible transport infrastructu	5.1.1 Integrate environmentally sustainable, energy efficient and socially responsible practices in planning, design and contruction of transport infrastructure	5.1.1.1 Incorporate climate change adaptation and mitigation considerations in the design and construction of transport infrastructure	1. Legal and Corporate responsibility by the Agencies involved.	MWTI/L TA/ SAA/SP A	2013- 2018	50	50	50	50	50	250
re and services		5.1.1.2 Encourage the use of energy efficient transport modes in the sector	2. Measure and limit vehicle carbon emission to a standard agreeable between LTA and MNRE	LTA	2014	50	50	50	50	50	250
		5.1.1.3 Support inclusion of transport emissions including aviation and shipping emissions trading regime and the United Nations Framework Convention on Climate Change	3. Gather the data and monitor the results of transport emissions	LTA	2013- 2018	50	50	50	50	50	250
		5.1.1.4 Support and ensure the inclusion of social impact assessment processes in design and construction of transport infrastructure	4. Establish and report on monitoring procedures for during and after implementation of relevant projects.	LTA	2013- 2018	50	50	50	50	50	250
Sub-Total						150	150	150	150	150	750

Goals and Outcomes	Strategies	Actions (costs in \$000)	Projects - Existing & Pipeline	Respons . Agency	Time- Frame	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	Total
Total Sector Costs						105,435	140,105	154,492	131,972	126,652	659,305

### **Appendix 7: Sector Definitions**

A common understanding of the meaning and implications of the words in the vision is necessary so that decision-makers may collaborate in achieving its aims. The meaning of the key components of the Vision Statement is:

"A sustainable" – This term applies to a number of parameters:

- Sustainable development meets the needs of the present generation without compromising the ability of future generations to meet their own needs;
- Sustainable development is the achievement of continuing economic development without detriment to the environment or natural resources;
- The goal of sustainable transportation is to ensure that environmental, social and economic considerations are factored into decisions affecting transportation activities;
- Sustainability is not about threat analysis, sustainability is about systems analysis. Specifically, it is about how environmental, economic, and social systems interact to their mutual advantage or disadvantage at various space-based scales of operation;
- Sustainability is the capacity for continuation into the long term future. Anything that can go on being done on an indefinite basis is sustainable. Anything that cannot go on being done indefinitely is unsustainable.

"efficient" - The financial and economic resources of Samoa are limited. The vision statement seeks to optimize resource use. The selection of the least cost alternative from the technically feasible options promotes production efficiency and increases investment benefits. The alternatives need not be limited to technical or physical solutions only, but could also include policy measures such as demand and supply management. Both can achieve optimum use of the existing facilities: the former by introducing tariff or pricing policies; the latter by maximising operation and maintenance programmes. The options considered must be realistic and able to be implemented.

**"safe and environmentally responsible"**– The solutions recommended in the transport sector must value and respect human life, and protect our citizens from injury or damage to their health. Transport services and facilities must also value and respect the environment by endeavouring to minimise harmful environmental impacts.

"transport network"- The modes of transport (land, sea and air) need to connect with each other to provide an integrated network that provides that greatest practicable, economic coverage for the movement of Samoa's people and cargo. This implies ensuring that key infrastructure (for example, ports and airports) are located close to population centres, to minimise transport distances, synchronising and rationalising journeys (to minimise fuel consumption), as well as facilitating hub-and-spoke approaches for the storage and distribution of goods.

"supports Samoa's economic and social development" – The transport sector's processes and policies must improve the economic and social well-being of Samoans. The government's goals of helpingthe agriculture sector to grow, assisting the tourism industry to develop and trying to revitalise the export of primary produce all rely on an efficient cost-effective integrated transport network.

	Key Performance Indicators and Targets	Baseline 2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Verification	Assumptions and Risks	Responsible Monitoring Agency
	Sector Governance									
1.1.1	TSSC and TSCU established to coordinate and plan implementation by June 2014.	2014	60%	70%	80%	90%	100%		Agreement between MWTI and Transport Agencies about appropriate functions and responsibilities.	MWTI
	Land Transport:									
2.1.1	Reduce kilometers of roads by 5% (national and access) vulnerable to climate change through reconstructions/ rehabilitations, resealing and routine maintenance. <sup>1</sup>	1150	1092	1037	985	936	889		Improved and weather proofed road infrastructure promotes economic growth.	LTA
2.2.1	Improve the Samoan Economic Corridor <sup>2</sup> .								Funding is available to carry out investigation and complete this corridor.	LTA
2.3.1	Firm up decision on alternative route to WCR <sup>3</sup> .								Complete Review of existing Feasibility study.	LTA

#### **Appendix 8: Sector Monitoring and Evaluation Framework**

<sup>&</sup>lt;sup>1</sup> The Engineering Standards are based on Australia road and New Zealand Road Construction Guidelines, the baseline data (1150km) represents existing kilometers of national and access roads in Samoa

<sup>&</sup>lt;sup>2</sup> Design for Leone Bridge in 2014/15, complete construction in 2017/18, Design for CRWCR and Vaitele St extension in 2015/16, start construction in 2017/18.

<sup>&</sup>lt;sup>3</sup> Complete review of existing Feasibility Study 2017/18 on alternative route

	Key Performance Indicators and Targets	Baseline 2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Verification	Assumptions and Risks	Responsible Monitoring Agency
2.4.1	Improved provisions for pedestrians <sup>4</sup> .								Improved safety provisions for pedestrian and cyclists on the road.	LTA
2.5.1	Traffic management in CBA <sup>5</sup> .								Improve parking controlling facilities in town.	LTA
	Maritime Transport									
3.1.1	All ports comply with IMO standards.	since 2004	70%	75%	80%	85%	90%		Annual report of safety audit of ports conducted by MWTI and SPA.	SPA/MWTI
3.2.1	SPA and all maritime agencies (e.g. PFL, Polynesian Shipping Lines, Port Agency, Samoa Shipping Services, etc.) achieve sustainable level of profitability.	since 1999	0%	2%	3%	5%	7%		SPA can become a financially viable entity.	SPA
3.3.1	SPA facilities are in good conditions as per national standards.	since 1999	100%	100%	100%	100%	100%		SPA facilities meet excellent standards.	SPA/MWTI/SSC/ STA
3.4.1	Vaiusu International Port constructed within timeframe.	existing documents since 1975	Final draft of comple te design- 100%	Construc tion & dredging begins - 10%	30%	70%	100%		Vaiusu International Port to be constructed and met timeframe.	SPA/MWTI
	Air Transport									
4.1.1	Faleolo International	since 1984	97%	97%	97%	97%	97%		Annual report of safety	SAA/MWTI

<sup>4</sup> 2014/15 planning and designs plus 1km p.a. from 2015/16 onwards for footpaths + complete Feasibility Study for cyclists by 2018/19 <sup>5</sup> Complete Feasibility Study by 2018/19

	Key Performance Indicators and Targets	Baseline 2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Verification	Assumptions and Risks	Responsible Monitoring Agency
	Airport compliance with international safety and security standards.								audit of airports conducted by MWTI and SAA.	
4.2.1	Airport to be constructed at Satitoa Aleipata.	2014	0%	0%	1%	2%	3%		Airport construction to commence and in compliance with international standards.	SAA/MWTI
4.3.1	Customer satisfaction conducted on services provided through the upgrade of domestic aeronautical and non- aeronautical facilities and services.	Since 1984	80%	85%	90%	95%	100%		Improve domestic aeronautical and non aeronautical facilities and services.	MWTI/SAA/STA
	Environment, Energy & Socially Responsible Sector									
5.1.1	Reduce fuel consumption by 2 percent p.a.	67.9 <sup>14</sup>	67	66	65	64	64		Transport sector agencies are able to monitor the consumption of fuel.	MWTI/TSSC
5.2.1	Social impact assessments for all future projects conducted.	2014	5%	5%	5%	5%	5%		Transport Sector agencies are to monitor the increase use of social impact assessments for future transport projects.	MWTI/TSSC
5.3.1	Develop an infrastructure asset management strategy (IAMS).	2014	Draft IAMS endors ed by	Submit sub- sector reports	Submit sub- sector reports	Submit sub- sector reports	Submit sub- sector reports		Submit infrastructure asset management strategy of each sub sector.	MWTI/TSSC

<sup>14</sup>Transport Sector fuel consumption in 2010: source : <u>http://www.reegle.info/policy-and-regulatory-overviews/WS</u>

	Key Performance Indicators and Targets	Baseline 2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Verification	Assumptions and Risks	Responsible Monitoring Agency
			TSSC							