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Towards the Strategic Transformation of Gujarat State Road Transport Corporation

INTRODUCTION

Gujarat State Road Transport Corporation (GSRTC), the State Transport Undertaking (STU) of Gujarat, came into existence on the 1st of May, 1960 as a result of bifurcation and rearrangement of the states, post independence. Over the next five decades, it grew from a modest beginning with 7 divisions, 76 depots, 7 divisional workshops and 1767 buses to 16 divisions, 125 depots, 226 bus stations, 1554 pick-up stands and 7750 buses. Consistent with its three tiered administrative structure, GSRTC set up three tier maintenance and repair facility consisting of 126 depot workshops, 16 divisional workshops and a central workshop. Besides, it also built 7 Tyre-Retreading plants, 1 bus body building plant with a capacity of 1000 bus bodies/year and 1 ticket printing press.

In terms of operations, it runs 6522[1] schedules of buses per day with an average of 6684 vehicles on road per day. The average vehicle utilization stands at 417 km/day with a mileage efficiency of 5.53 km/l of diesel and a fleet utilization of 87.89%. The yearly passenger load is around 875 Million with a total traffic earning of Rs. 13474 Million. GSRTC provides connectivity to approximately 98% of rural Gujarat as also some important travel destinations in the neighbouring areas. In terms of population, the corporation covers 99% of the state's population.

In contrast to the operational expansion, the financial performance however had been less spectacular, with the corporation accumulating losses in its balance sheet for consecutive years. The losses were a result of a combination of factors – both internal and external in nature and origin. This necessitated a turnaround initiative towards profitability. As a first step towards the turnaround process, the corporation redefined its vision and mission statement to *evolve as a strategy-led competition focused and customer oriented premier organization providing multifarious services in transportation, communications, logistics, mobility, travel and transport-related manufacturing and maintenance organization.*

Words par se do not turn around an organization. Turning around GSRTC into a profitable and self sustaining organization requires comprehensive efforts of all the stakeholders both from within and outside the firm boundaries. This is more so applicable to state owned enterprises, given their divergent objectives arising out of divergent utility perception of key stakeholders. To cite an example, the corporation is currently facing the challenge of implementing the provisions of the 6th Pay Commission to its employees which is likely to further constrain its depleted resource position.

[1] Information provided for the FY 2008 – 09 by GSRTC.

The Case Writers wish to acknowledge Mr. Raj Gopal, IAS. Vice Chairman and Managing Director of Gujarat State Road Transport Corporation along with all the officials of the Organization for their active cooperation in writing the case.

Therefore, it is imperative to investigate whether, GSRTC as an organization is worth investing, in terms of turnaround initiatives.

Given the nature of the problem at hand, a detailed case study was initiated to examine a set of inter related issues. The purposes of identifying the issues were enumerated as under:

(i) To judge the social relevance of GSRTC and build a case for turnaround or otherwise

(ii) To objectively identify the problem areas and examine the capability of the corporation, *standalone*, to respond to them

(iii) To examine the role of the State Government as effected through its policy and financial interventions.

To this end we formalized the above issues in terms of the following six questions namely:

1. What role does GSRTC execute through its services and what is the social cost imputed to it?
2. What policy and related factor have affected the performance of GSRTC and to what extent?
3. What initiatives have been taken by GSRTC to improve performance related functional parameters?
4. How efficient has GSRTC become operationally with respect to other State Transport Undertakings (STUs) as a consequence of in-house initiatives?
5. What initiatives should Government take to help GSRTC to continue its role in fulfilling social obligations?
6. What would be the implications to GSRTC as a consequence of Government interventions?

The case study follows the aforementioned question pattern and consists of 6 sections and concludes with a frame of reference, likely to be generalizable across similar organizations.

GSRTC'S ROLE IN THE SOCIETY AND ITS IMPUTED SOCIAL COST

GSRTC came into being on the 1st of May, 1960 through the bifurcation of the Bombay State Road Transport Corporation. Over the last five decades, it registered an operational expansion of around 350% in terms of number of buses, with an average of 6522 schedules per day and with 6684 vehicles on road (2008-09). It operates around 42,016 trips per day of which around 38031 trips are ordinary while 3985 trips are express trips. In terms of connectivity, GSRTC directly services 17756[2] or equal to 98% of the total number of villages in the state. Its services reach within 3 kms w.r.t. 359 villages, between 3 to 5 kms w.r.t. 134 villages and exceeding 5 kms w.r.t. 159 villages. On an average it operates 28 lakh km and a passenger load of 24 lakhs a day reaching to 99% of the state's population.

In terms of employment generation, the Corporation directly employs about 41,000 people (of all categories) most of whom are in the permanent role and draws salary which are inflation adjusted. The corporation, being a state undertaking, has an obligation to conform to all statutory and legislative requirements and which is being complied with.

Connectivity Cost

[2] Information generated and provided by the officials of the Corporation

GSRTC commutes 875 million heads on a yearly basis given that it transports about 24 lakh passengers a day. Given that the per capital income of Gujarat is Rs. 45,773 (2008-09)[3] and given that GSRTC carries 24 lakhs of passengers a day, then on a daily basis, the corporation *enables* a contribution of Rs. 42.252 Crores to the state exchequer. This is arrived at by considering an individual earning Rs. 45,773/- spread over 52 weeks @ 5 days a week and multiplying the same with 24 lakhs as the daily passenger load. Further assuming away 50% of the commuters who are either subsidized or students or live below the state's per capita income, even then the annual enabling contribution would be Rs. 10,986 Crores p.a. This is a *counterfactual measure* which means that, had GSRTC not plied for a day and had the passengers not gone to their places of work for gainful employment, then the Exchequer would fail to earn Rs. 42.25 Crores/day or Rs. 10,986 Crores a year. This measure further assumes that there are no alternative and economically viable modes of transportation available to GSRTC commuters.

Social Responsibility Cost

As the state transport, GSRTC fulfils its obligation towards the less privileged and financially dependent section of the population. In absolute terms, GSRTC has issued 6.85 Lakhs of Student Concession Passes along with 2.17 lakhs of passes for Physically Challenged and around 44525 passes for Cancer Patients in the year 2008-09. The extent of concession extended by the corporation and its financial implication in terms of a base fare of Rs. 10/- per trip for 22 working days per month is depicted in Table T6. Therefore per month, the Opportunity Cost of GSRTC is around Rs. 36.37 Crores which on a yearly basis adds up to Rs. 436.47 Crores. This is a conservative estimate as we have not considered the revenue lost on account of daily passengers who constitute a substantial portion of the passenger load of the corporation.

Direct Tax Contribution

In terms of direct contribution to the exchequer, the corporation remits to the Government an amount equal to Rs. 332.13 Crores over a traffic earning of Rs. 1347.35 Crores (2008-09). This is equal to 24.65% of gross traffic earnings by the corporation.

Therefore GSRTC contributes the following amounts under following categories to the State:

(i) Direct Remittance = Rs. 332 Crores p.a.

(ii) Through Cross Subsidy in form of concessions = Rs. 436 Crores p.a.

(iii) Obligatory service (arrived as a counterfactual measure) = Rs. 10,986 Crores p.a.

Thus on a year to year basis, GSRTC *directly* contributes a minimum of Rs. 768 Crores to the exchequer and *notionally* a maximum of Rs. 11754 Crores through its obligatory enabling services. Therefore as a subject of study, the Corporation merits investigation for turnaround and business transformation initiatives.

IMPACT OF POLICY AND RELATED FACTORS IMPEDING PERFORMANCE OF THE CORPORATION

Post economic liberalization, in order to mitigate Government failures in key infrastructural areas (due to resource constraints leading to stunted PSU expansion), the Government allowed participation

[3] CMIE database

of private equity in infrastructural areas. Such decisions with respect to GSRTC lead to a range of consequences, impeding its performance.

Disruption of Intra – Organizational Cross Subsidy

STUs like GSTRC manage and maintain a delicate balance in their route operations. In this operation, proceeds from profits made in one route are used to subsidize operations in non-remunerative segments. This is part of the *universal service obligations* (USO) of GSRTC. However, this delicate balance gets disrupted if competition is introduced in profit making segments to the exclusion of loss making ones. Table T2 provides the types and percentage of profitable routes and therefore renders a flavour of internal cross subsidy within the Corporation. Operationally, only 30% of GSRTC's trips break-even while 27% of the aggregate trips do not even recover the basic variable cost like diesel. *This therefore needs for the routes to be either cross-subsidized or closed*. Closure of 27% of the routes, that does not cover diesel cost, would lead to a prorate savings (towards fuel cost only) of around Rs. 189 Crores (2009-10 figures – the gross fuel cost for the same time period is Rs. 699.16 Crores- Table T12). This is sufficient to clear the deficit from accounts. Route closure however cannot be done under USO norms.

For the remaining 43%, improving operational effectiveness can be an option, *provided there is scope of it and provided an accurate estimate of the efficiency can be determined*. Introduction of competition into the earning segments (21% of trips) shall pull down the means of cross subsidization thereby making the corporation a perennial drain to public exchequer. To cut losses, Government may disinvest or even close down, but there is a need to perform a cost benefit analysis keeping the social angle in view.

Financial Disincentives

The Government of Gujarat levies a passenger tax of 17.5% on passenger income from the corporation as it operates as a stage carrier. Therefore, the private operators, in contrast, pay a yearly tax of Rs. 90,000 per bus as, in theory, they operate as contract operators. In practice however, they operate as stage carriers thereby exposing the corporation to uneven and illegal competition. In 2008, a rough estimate by GSRTC shows that around 1,35,014 jeeps, 15,878 Maxi Cabs and 16,012 Omni Buses operate as stage carriages under casual contract permits. Adding to this uneven competition, on an average, each private express bus pays an aggregate tax of Rs. 1.84 lakhs while GSRTC pays Rs. 4.99 lakhs as tax per bus which aggregates to Rs. 237.9 Crores. as shown in Table T3.

Another financial disincentive acting against GSRTC is the Motor Vehicle **(MV)** and Toll Tax which the Corporation is paying to the Government. In reality, this is a book adjustment between the books of account of two government departments which however leaves the accounts of GSRTC unhealthy. A detailed analysis of the effects of 17.5% passenger tax on the financial health of GSRTC is provided in Table T2. The information is provided by the management of the Corporation replete with future projections over a 5 years planning horizon. An average increase of around 5.5% is considered which is consistent with medium term inflation rate.

It is evident that, *ceteris paribus*, GSRTC under the present taxation policy shall remain a loss making organization at least till 2011 – 2012. This apart, the corporation, under obligation of a public utility service, cannot charge the customers, a *floating or dynamic rate* for tickets depending on demand and supply conditions in the market. Therefore the cost of the ticket is independent of the cost of service provided by the corporation. Consequently the cost competitiveness of the corporation suffers along with its profitability.

Inflexibility in Procurement Norms

GSRTC has to adhere to strict norms in terms of tender, bidding and procurement coupled with fiscal discipline as it is accountable to public authorities. Public accountability requires acceptance of lowest bid/quotation which leads to delays in procurement of the desired type. This in turn leads to usage of older fuel inefficient buses with high maintenance cost. Table T3 provides a synopsis of the fleet position of GSRTC.

The table shows that over a base of 2000-01, the corporation has undergone a reduction in fleet strength of 24% (2008-09). The average number of buses discarded annually over this period is around 1017 buses while the average rate of procurement from 2004-05 to 2008-09 is around 940 buses. But the trend leading to depletion is steadily getting reversed with renewed procurement of buses. However, it may be noted that the trend of procurement is steadily getting skewed towards procurement of CNG buses. The procurement trend is presented in Chart C1.

Environmental Norms on CNG Bus Procurement

Referring back to Chart C1, it is evident that GSRTC is procuring more of CNG buses, in terms of percentage increase, than diesel buses. This is done under obligation to comply with Government norms which, in turn is an effort to comply to UN mandate. The larger UN mandate to free the environment from Green House and NOx gases have invoked the Government (both at the Centre and at the States) to stress on CNG Buses. The underlying assumption is that, CNG being a lighter fraction is less polluting besides having lower running cost. This perspective, at best, reflects partial truth. Being a light fuel, CNG consumption, for the same power output, should also be more. This implies that to maintain same level of output, the mechanical work done must be more compared to diesel engines which lead to higher wear and tear and consequently higher depreciation cost. Secondly, to maintain the same energy output, more air is needed resulting in higher generation of NOx gases per cycle. Leaving aside the environmental issues, a pure cost benefit analysis presented in Table T4 shows a comparative statement of total cost incurred by the corporation in running CNG vis-à-vis diesel buses.

Therefore while the relative running cost for CNG buses is lower by Rs. 4,72,707.00 in absolute terms (or Re. 0.59/km, over 800,000 km running life of the buses) overall the Diesel buses have a cost advantage of Rs. 2.23/km which is **3.77 times (377%)** more economic than CNG buses. Adherence to Government's environmental norms has forced the corporation to procure around 1450 CNG buses with a relative aggregate (net) cost disadvantage of Rs. 17,79,542.00 per bus over an average life cycle of 8,00,000 km. At the aggregate level, over the life of the 1450 numbers of buses, the corporation stands to loss around Rs. 258 crores (without considering the discounting rates).

Cap on Recruitment Policy

Not withstanding the regular severance of personnel from the payroll on account of superannuation and some attrition, the corporation has not been able to recruit people in areas deemed critical for its operations. This is on account of Government Cap on fresh recruitment in loss making public sectors. While this action by the government has economic rationale, the corporation is suffering due to man power depletion in critical areas of operation. Table T5 shows the Manpower deployment in functional areas factoring in natural attrition.

The above Table T6 shows that at the current level of fleet usage (**6684** running buses) the Corporation will not be in a position to run two shifts (number of drivers = **10807**). Given that under

the present taxation system, GSRTC shall remain a non profitable organization till 2012 (vide Table T3), then,

(i) Either the present tax regime with respect to GSRTC has to be revisited or

(ii) The policy on capping recruitment has to be revisited or suitably modified to bridge the gap over critical man power requirements.

There is a third alternative and that is, the Government may consider, progressively reducing the scale and scope of operation of GSRTC, thereby just maintaining the balance of between the fleet and staff strength. But this option has to factor in the social cost that is imputed within GSRTC's mandate and which has a direct bearing on the Universal Service Obligation norm.

Thus it is apparent that the aforementioned regulatory impediments either directly affect the operational effectiveness of the corporation or act in conjunction with other factors to act against the corporation. Thus regulatory impediments remain an important factor of consideration with respect to the revival plan of GSRTC.

Effects of Economic Prosperity of Customer Segment

GSRTC exists for the commuters who are its customers. Therefore, investigating the customer behaviour, their evolving aspirations and preferences and achieving a fit between the two, constitutes the primary function of the corporation. GSRTC had been in the business of rural connectivity and limited urban commuting. Rural commuters can be divided under two categories based on the distance travelled (i) Short distance commuting and (ii) Long distance commuting. Based on convenience and economical considerations, passengers typically prefer bus for short distance travel and train/aeroplane for long distance travel (more than 200 - 250 KM). This is based on the following considerations by the Commuters:

1. Number of Transactions involved during the travel
2. Availability and accessibility of vehicular transport from source and sink point
3. Time of travel (i.e. journey more than 2 hours is difficult to sustain on a daily basis)
4. Cost of Travel
5. Group size of commuters
6. Comfort during the travel including those during the stoppages

From the passenger's perspective, Road Transportation is an optimization decision based on the above six primary variables. While Number of Transactions, Availability and Accessibility are an advantage, Time and Cost of travel are not. Traditionally, the Railways score higher on these two Variables. The last two variables are complex in nature. While capacity limitations (upper bound considerations) of the transport decide the mode of journey, the minimum acceptable levels of comfort (lower bound consideration) determine the choice of the last variable. To that extent, the fourth and the sixth variables are functions of the economic prosperity of the commuters. The traditional travel preferences of the commuters with respect to the mode of transport (road, rail or air) have started seeing a change due to a variety of reasons. Three factors are predominant in this regard which is enumerated below:

Economic Prosperity of the Passengers: The following issues, with respect to the relative economic prosperity of the passengers, are likely to affect the revenue of GSRTC through lower passenger load/bus:

1. A substantial number of erstwhile passengers have bought their own vehicles including two wheelers and four wheelers
2. Passengers are short on time of travel
3. Passengers are stressing on quality and reliability of services

All these factors imply a reduced esteem or preference of GSRTC with respect to the needs of the passenger and which translates to lesser usage of GSRTC's services.

Commoditization of travel exclusivity: The commoditization of travel exclusivity means the following factors:

1. The cost of four wheeler vehicles have come down and low cost cars have almost become a commodity
2. Two wheelers are available on demand due to de-licensing of quotas
3. Air travel has become quite common across the population due to decoupling of price structure and its consequent reduction in the low cost airlines

Therefore the passengers of today have a larger choice set available before him and he/she is no longer dependent on any particular mode of transport

Gradual development of alternative transport infrastructure including airports: With the gradual emergence of India as a developed economy, factored by the ready or near emerging availability of supporting infrastructure, Indians in general and the traveller in particular has multiple options to choose from. The gradual removal of disparity in the cost of travelling can also be attributed to this phenomenon.

Therefore with respect to competition, new sets of rules have emerged. The traditional advantages to road transport as a whole are not fully applicable now. One can park his car or bike (for a small fee) at the airport or station and avail a faster mode of transport. Alternatively, due to the focus of the Government on development of Highway Infrastructure, cars are a better option, given the economic prosperity involved. Last but not least, the increased congestion of the city roads due to higher traffic volumes and limited development of arterial networks have slowed down the average speed of the bus as a whole. The commuters as well as the likes of the Corporation are the losers. This is likely to negatively impact the revenues of the Road Transport Corporation, if preventive steps are not taken.

The brighter side of this problem is that the corporation can concentrate in its operations in the rural areas and in the express trips. By increasing the customer focus in these sectors and by providing superior services, GSRTC may wish to create a dedicated customer base in the rural sector. This is also in line with the USO norms. However, the constraints in this approach lies with the low passenger density at the rural areas that may not justify the frequency. Also daily commutation from rural to urban areas is a function of the existence of gainful employment opportunities in urban areas over the opportunity costs in the rural areas. This factor is beyond the control of GSRTC and therefore may not merit investigation in the short five year planning horizon.

Absence of a Clear Public Transport Policy Regarding GSRTC's Role

The aforementioned impediments to the operational aspect of GSRTC can be attributed partly to the absence of a clear public transport policy – that will define the role and functioning of the corporation, under the changed economic conditions. This is particularly true, given the ownership of the corporation, which lies with the Government. A clearly defined public policy, with respect to the motorized public transport which is the State's prerogative, shall provide a much needed direction for the management of the corporation.

That the Corporation had played a vital role during the formative years of the state can be gauged from the following Table T-7 which shows the average number of vehicles on road and the ratio of population served per bus on road. Due to paucity of private buses or even personal vehicles, the STU played a vital role in serving the population.

As is evident from Table T4 above, the number of vehicles (including that on road) have decreased from 2002-03 onwards while the population has increased. This lends support to the assumption of:

(i) Higher economic prosperity of the population (i.e. more people owning private vehicles) and

(ii) The emergence of private competitors in the protective turf of the corporation.

Given this changed scenario, it is pertinent for the Government to ponder upon the following options namely;

1. Whether Government, as a matter of policy, should discontinue promoting the corporation (and face the high social cost in its absence as stated previously)

2. Follow a piecemeal and adhoc policy with respect to the Corporation and in the process incubating the private enterprises to fully takeover the role of the Corporation

3. Recognize the importance of Government intervention in the public transport sector and come up with a coherent public policy, clearly defining the role of GSRTC

But why should Government at all consider the third option? The third option is important due to the following set of reasons w.r.t. public transport namely;

1 More cost effective, safe, regular time frame system and environment friendly.

2 *Conditio Sine qua Non* for mass development and growth.

3 Concessions and subsidies targeted to rural populations and students in public transport actually help education, public health and rural economy by providing increased mobility.

4 Personal transport poses its own set of problems. Personal car owners pay only the direct costs of operating their vehicles externalizing the residual cost of operation to the nation and the environment namely, greater congestion, higher pollution, increased road maintenance cost, and higher risk of road accidents. For example an average car emits approximately 4 tonnes of pollutants annually whereas buses produce much less per person per kilometer, have smaller road use footprints and higher safety.

Therefore there is a case for Government interventions in framing a comprehensive public policy for the state transport undertakings like GSRTC.

GSRTC'S STRUCTURAL INITIATIVES TOWARDS PERFORMANCE IMPROVEMENTS

Faced with impediments from the regulators, external competitors as well as internal inconsistencies, GSRTC responded through a series of restructuring exercises aimed at revamping the administrative and operational aspects coupled with that of the human and financial resources. Some of the initiatives (both planned and implemented) are described in the subsequent sub-sections.

Administrative Restructuring

GSRTC has initiated an organization wide restructuring process to reduce overhead costs and increase the productivity efficiency of allocated resources. In this regard, the corporation has primarily taken/planned three steps which includes (i) Proposed merger of low performing depots and divisions, (ii) Development of infrastructure through PPP Route and the collection of attended premium income and (iii) Proposed conversion of cost centres to profit centres. The same are detailed below.

Merger of Divisions and Depots: GSRTC has planned to merge the less efficient divisions and depots thereby bring down the cost of operation. The proposed plan of merger is presented in Table T8. The corporation envisages the following benefits with respect to the proposed merger plans:

- Reduced cost of overheads leading to more productive allocation of capital and human resources
- It would free real estate assets for more productive usages like setting up satellite bus stations, parking spaces for land crunched cities, go-downs, budget hotels and parcel services
- Reduction of idle manpower and reallocating them in needed areas after necessary training and screening for positive attitude and desirability
- Minimize incidences of negative work culture in localized ghettos or pockets

In terms of financial measures, the proposed merger plan would lead to a savings of **Rs. 84 lakhs p.a**. towards administrative expenses and freeing up real estate to the tune of **3,61,376 sq.m worth Rs. 148.57 Crores** (at present value). The same can be sold upfront or developed through the PPP route to ensure continued stream of revenue for the corporation.

Infrastructure Building through PPP Route: GSRTC has taken the initiative of bringing in Private Sector Participants (PSP) to develop lands owned by the corporation into Bus Terminals. A total of 51 such terminals are contemplated across Gujarat under the Built – Transfer – Lease (BTL) mode. 17 terminals are already modernized across Gujarat. This mode of development termed *Value Captured through Linkages* enable the corporation to harness economies of scope (like commercial centres built adjacent to Terminals) without capital investment. This initiative is likely to provide the passengers with much needed comfort thereby enhance retention as well as provide advertisement revenues to the corporation. Besides the corporation has also earned a premium income of Rs. 38.4 Crores (2009-10) through infrastructure developed through PPP projects.

Conversion of Cost Centre to Profit Centre: Another initiative in the anvil of the corporation involves transforming the cost centres to profit centres. Typically maintenance departments like workshops are cost centres for the corporation. Plans are afloat to convert them to profit centres through reduction of existing cost structure and enhancement of handling capacities. This is contemplated along two routes namely:

a) Outsourcing basic operations like hiring buses with drivers so that related expenses like maintenance are default outsourced to the existing maintenance relations and linkages of the hired buses.

b) Contracting out existing facilities to third party transporters like private operators. This will enhance the usage of the existing facilities. The income from the same would add to the marginal revenue from the workshop division given that fixed costs like salary are incurred irrespective of fluctuations in quantum of work.

The decision of the corporation towards converting the cost centres to profit centre is partly based upon its expectations with respect to the Draft Bus Body Code of Government of India. This code, if implemented properly, shall enforce stringent construction norms which only resourceful organizations like GSRTC can comply with. Under that scenario, GSRTC can leverage its existing infrastructure like the central workshop to construct buses and other vehicle bodies for other Government Departments like Police, STUs for other states and even the buses for private sector.

Similarly, other divisional workshops of the corporation can be used for repair works of both the corporation and the private sectors. The corporation has plans to engage workers on contractual basis to reduce the overhead cost and other permanent liabilities. However effectiveness of implementation of either of the models is a function of the negotiation skills and extent of control exercised by the management over the employees and trade unions.

Human Resource Restructuring

As a public sector organization, human resource restructuring has always remained a sensitive issue. The corporation had faced non-cooperation from the existing Trade Unions in the past. Human resource restructuring with respect to GSRTC involves not only rationalizing existing jobs to bring the head count to bus ratio at par with private and the best performing STU, but also to enhance the skill sets of the employees for future usage. Man power planning of the Corporation has to be carried out with tact and due diligence to balance opposing standards. Currently, the head count per bus is 6.2 as opposed 5 heads per bus for private operators. However, against its owned sanctioned strength of 54,663 employees, the corporation is employing 41,374 heads (31.03.2009). This contradiction can be explained, interalia, due to high manpower in non revenue generating areas and vice versa. Table T6 appears to lend support to the above assertion.

Job Role Rationalization: To overcome the job role discrepancy and to circumvent the policy on manpower freeze, the corporation has proposed a new incentive scheme for drivers in conductor-less buses. This initiative focused more on the relative importance of the drivers over conductors and stressed on multi-skilling without affecting the specific competencies. However opposition by a section of the employees abnegated this initiative. Consequently, the corporation took a new initiative to create a new cadre at fixed salary of Rs. 3,500/- and aimed at bridging the driver shortage. This initiative is likely to reduce the yearly wage bill of the corporation to an amount of around Rs. 85 Crores (including bonus and PF contributions) for sanctioned driver strength of 16289 heads. The installation of Electronic Ticketing Machines (ETMs) shall further reduce the need of conductors, especially in the long distance routes. This initiative, however, is yet to begin. The corporation is clearly looking into deemphasizing non core areas like administration, traffic and conductors which can be substituted optimally through automated systems. This in turn will lead to reduction in overheads as well as pilferages.

Enhancing Staff Skill Sets: GSRTC has undertaken a whole range of activities towards organizational restructuring and turnaround. The corporation has implemented the e-Governance system including "conductor Way Bill Accounting System" in all the 125 depots, Advance booking and Reservation system at district H.Q., deployment of 7700 electronic ticketing machine on all the schedules etc. Besides these, the corporation has also introduced the Stores-Inventory-Management System and in the process of introducing GPS/GIS base online bus tracking system for luxury buses as well as online ticket booking and time table updation. At the lower end, the drivers are to be trained to handle the passengers without the conductors.

The aforementioned activities entail preparing the existing employees to enhance their existing skill sets. The type of skills to be imparted shall vary from basic operating and accounting skills to be imparted to the operating staffs to technical skills to be imparted to the mechanics and leading all the way to managerial skills and perspectives to be imparted to officers and senior admin staffs. The skill enhancement has to be carried out across the organizational hierarchy so that (i) knowledge gets disseminated throughout the organization and (ii) no one is left out of the necessity and privilege of the training process.

The purpose of the training is to enable the employees and specially the officers to appreciate the problems at hand and buffer themselves against present and future challenges. Another important need for skill imparting is to redeploy the personnel who may be rendered redundant due to implementation of e-Governance and automated ticketing and who need not be severed from the corporation due to certain criteria like age, compensation etc. The alternative is to fully outsource the activities which will lead to loss of control and opposition from trade unions. As of now, the corporation has plans to impart necessary skills and training to 5000 crews and technical staffs as part of its capacity building exercise.

Financial Restructuring Measures

GSRTC, for the FY 2008-09 has incurred a loss of Rs. 85.59 Crores (Table T3) and the loss, ceteris paribas, shall continue in its balance sheet for another two years. Over and above this loss, the corporation is likely to incur an additional annual burden of Rs. 250 crores with effect from 01.01.2011 on account of 6th Pay Commission revisions. There would also be an arrear payment estimated at Rs. 600 Crores. While the Government values the services provided by the corporation and assists it by way of subsidies and reimbursements, it cannot continue subsidizing an ailing corporation on a year on year basis. The Corporation, on its part, has embarked on certain financial restructuring measures, with others on the anvil, to tide over the crisis. The same are described below.

Augmentation of Non Traffic Income: GSRTC has adopted a multi pronged strategy to augment non traffic income as complementary sources of revenue generation. Endeavours towards the same are noted below.

- *Creation of Extra cargo Handling Capacity:* GSRTC has planned to create extra cargo handling capacity in its buses. While all the new buses shall have this new feature, the existing buses shall have the option of undergoing refit to augment their cargo carrying capacity. As per the present design, the new GSRTC buses shall have 1.5 cubic metre of space in the left side of the bus and 4.5 cubic metre of space in the rear side where it shall also carry its necessary spare parts. The corporation has plans to auction out the space to third parties where in the third parties shall use them to carry parcels and other merchandise. The corporation shall maintain strict vigil to ensure that its bus spaces are used for transportation of legal items of trade. In terms of financial numbers, a conservative

estimate of Re. 1/Km/day shall provide the corporation as additional income of Rs. 7.8 lakhs per day or Rs. 28.47 Crores per year. This is under the assumption that 6.0 cubic meter of space shall translate to 1000 kg (1 ton) and the corporation shall have 1880 buses per annum.

- *Revenue through Advertisement:* The bus bodies act as mobile boards/hoardings for advertisements. The corporation has been augmenting its revenues using that source of non traffic income and has earned Rs. 4.89 Crores in 2008-09.

- *Sale of Scraps:* With the setting up of the e-governance system, the corporation has implemented the "Inventory Management System" at the Central and all the Divisional Stores. While E-tendering process is in progress, the corporation is into reverse auctioning for sale of scraps which has lead to better price realization.

- *Market Survey of Rural Areas:* Another novel source of revenue generation planned by the corporation is by enabling market survey firms to use the corporation's resources and provide rent in return. On an average, GSRTC buses carry 25 lakhs of passengers per day out of which about 10 lakhs are regular commuters and students. The remaining 15 lakhs are casual passengers. This implies that the corporation physically contacts a group of dedicated or specialized population and another group drawn randomly from the population. This is a rich source of segregated survey data. The corporation plans to (i) provide Market Research agencies the usage of transportation and infrastructure facilities in rural areas, (ii) allow the agents of insurance, mobile and other allied services to sell their products and services directly or the commuters and (iii) if needed, deploy the corporation's employees to sell the services or administer the questionnaire for a fair estimate and prevent pilferage.

Augmenting Traffic Income: GSRTC has taken steps to increase the traffic revenue and simultaneously cut costs. The measures taken by it are enumerated below:

- *Introduction of incentive schemes:* The Corporation has introduced incentive schemes linked with increased revenue earning and consequent profit sharing. This has lead to marginal increase in revenue earnings.

- *Introduction of value Added Services:* The corporation has introduced Sleeper and Air conditioned Volvo buses which are deemed value added and are charged accordingly. Besides, with the e-governance in place, the corporation is also providing SMS based time table which in itself is a value added service.

- *Cost Cutting Measures:* Besides direct attempt to increase the revenue, the corporation has also taken a host of measures to save cost, a few of which have already been said. GSRTC has set up 7700 numbers of Electronic Ticketing Machines which are likely to reduce the cost incurred in employing the conductors. Establishment of electronic system has also enabled the corporation in cutting cost through reverse auctions.

Conversion of Loan to Equity: Another initiative thought through by GSRTC involves restructuring and converting its existing debt portfolio into promoter equity. During the process of corporatization of Department of Telecom Services (DTS) into BSNL, the Central Government extended loans to the organization which was later converted to promoter equity. Such instances abound with Government of Maharashtra which has recently undertaken similar activities with respect to its STU. The financial benefits to the Government of Gujarat are likely to be more and over an extended period of time

through the dividend route rather than interests on debts – which is finite. This is under the assumption that corporation is profitable or becomes profitable as a consequence of the waiver.

Operational Restructuring Measures

GSRTC has envisaged an ambitious plan to augment its operational efficiency by around 25% over the next five years. This is to be achieved by a combination of activities which includes:

- Induction of new diesel buses and phasing out of older and less fuel efficient ones
- Increasing the crew utilization rate through role rationalization and fixed salary cadre
- Running more scheduled trips after carrying out a route rationalization exercise
- Catering to the organic growth in the number of students. The student population is increasing at the rate of 10% p.a. and to address that segment only, the corporation needs 300 new buses annually (equivalent to 1200 trips) dedicated to this population

The projected outcome of the operational restructuring measures, as planned by GSRTC, is presented in Table T9. It is evident from the table that the corporation envisages an expansion of over 20% in the next 5 years in terms of schedules, vehicle numbers and aggregate effective km.

Apart from organic growth in terms of number of buses, GSRTC is also contemplating on reducing cost of operation and beating competition by converting competitors into collaborators. The set of measures taken by the corporation are enumerated below.

Route Auction: One of the primary causes of concern for the corporation is unfair competition from private contract carriages which operate, in practice, as stage coaches – but evades taxes. To address this problem, improvements in efficiency parameters alone will not suffice and the same has to be tackled at the regulatory cum economic level.

A strong vigilance aimed at mitigating this problem can be a way out – but requires dedicated resource which is wonting. Therefore converting an illegal operation into legal activity can be another way out. The corporation is contemplating on auctioning out some of its routes, both lucrative and non lucrative, to private operators with the caveat that the operators shall indicate the number of buses that they are plying and any deviation from the set norms shall attract penal provisions as framed under the auction contract. This measure, it is envisaged, shall have the following advantages:

- It shall generate royalties which can be shared by the corporation and the government
- It shall reduce the burden on the corporation in terms of operating in less lucrative routes. Here the assumption is that the private entrepreneurial spirit shall identify ways and means of generating revenue even from apparent non-lucrative segments. However a call has to be taken, given the magnitude of social cost serviced by GSRTC through its operations in rural areas and its services to the differently enabled passengers.
- It shall introduce a new set of vigilant eyes – that of the private operators in preventing illegal operations. It is assumed that convergence of interest between the corporation and the legalized private operators shall prevent illegal operations in the auctioned segments.

Introduction of auction mechanism does not imply that the corporation shall forego its rights to operate in the auctioned routes. On the contrary, it shall reserve the rights to operate and in the process shall (i) introduce operational efficiency within its folds as an outcome of legal competition and (ii) act as a buffer for the general commuters – should the private operators resort to unfair practices, in contravention to commuters' interests, as a monopoly or as a collective oligopoly.

Route Rationalization: A Trip Wise Analysis of the corporation (Table 2) reveals that over 50% of the Ordinary Trips of GSRTC do not cover the operational cost while the same for Express Trips stand at 9%. On the other hand in terms of profits, the Ordinary Trips make only 18% profits while 50% of the Express Trips contribute positively. Therefore it makes eminent sense to rationalize the Ordinary Trips in favour of the Express Trips with an emphasis on Profit Making routes.

This is also consistent with the gradual evolution of the surface transport segment. Ordinary Trips within the three cities where GSRTC operates will continue to witness decline in numbers of bus passengers with increasing prosperity of the commuters. However, the relative inequality in prosperity in the rural and semi-urban areas affords the corporation a way to address their transportation needs through bus service. This is also consistent with the Government's developmental policies to which the corporation stands as a guarantor and receives subsidies for the same.

Another emerging avenue for the corporation is to stress upon inter-state services which has come into being following the activities of National Highway Authority of India in developing and widening the road network. In this segment, the corporation can soon emerge as a viable competitor of the Indian Railways in making long distance travels in reasonable time. The other threat to this avenue of growth is from the other State Transport Corporations which also operate within Gujarat or use Gujarat as transit state to pick up passengers midway. Therefore GSRTC is contemplating on inter-state agreements with neighbouring STUs for mutually beneficial and synergistic operations amongst STUs.

Facility Improvements: GSRTC has undertaken a number of measures at developing and creating new infrastructures which includes the following:

- *New Bus Terminals* – GSRTC has made 22 new bus terminals at a cost of Rs. 15.32 Crores along with 39 pickup stands from the local area development funds of the MPs & MLAs

- *Upgradation of Stations and Terminals* – GSRTC has also upgraded the Gandhinagar Bus Station at a cost of Rs. 2.85 Crores and has also built satellite bus terminals at Krishnanagar, Udhana and Nizampura at an aggregate cost of Rs. 3.00 Crores. Besides macro construction activities, the corporation has set up a whole range of facilities like pay and use sanitary blocks, waterproofing of bus stations and side wall dado in the bus stations, upgradation of toilet blocks and water rooms, protecting the bus stations with compound walls and powder coating sitting benches, upgrading signages and timetable boards, colouring and rewiring in the stations. Another improvement with respect to the passengers is the revamping of the public address systems, public information centres and public entertainment system at the bus stations. Advertisement revenues will also be generated from the public entertainment systems. The pilot is started at Ahmedabad and shall be extended to district headquarters.

- *e-Governance initiatives* – GSRTC has extensively employed e-governance to set up 7700 electronic ticketing machines, SMS based time tables, online time table for Express buses, biometric attendance system, core banking systems and e-tendering. It is in the process of implementing online passenger reservation system which will enable it to further restructure its manpower requirements.

- *Other operational improvements:* the corporation has plans to launch 1000 buses for the tribal areas which are branded as Vanbandhu Buses. GSRTC is in the process of obtaining ISO certification for 6 remaining divisions along with rolling out of Integrated Depot Management System in 25 depots and RFID/Smart card based passes to one lakh of its regular commuters.

Customer Services: Over the years, GSRTC has build up 229 bus stations, 1554 pickup stands, 221 refreshment rooms and 621 drinking water facilities. It has 705 canteens and stalls besides 48 cloak rooms and 293 parcel booking points. It has also set up 72 Sulabh/Nasa Lavatories. GSRTC essentially operates in the model of a mini Indian Railways so far as commuter convenience is concerned.

Faced with competition and as part of its restructuring process, the corporation has extended several facilities to its regular and special commuters. These facilities mainly centre round providing fare concessions and attendance facilities. The same are enumerated below:

- GSRTC is currently providing 82.5% concession to students with free passes to village girl students
- 50% concession to daily travelling passengers
- 100% concession to blind people and patients suffering from cancer along with 1 assistant in each case
- 100% concession to eye donors, physically disabled, press and TV reporters (with unlimited travelling within Gujarat) and freedom fighters and their widows.

As has already being said, these measures are a way of cross subsidizing the less privileged part of the society with GSRTC acting as the conduit in the social welfare process.

Besides concessions, the corporation is providing other value added services like Express Time table in website and SMS and mobile phone services in express routes and coin operated phone in ordinary routes. It is also providing special concessions like Monthly Pass, Return Advance booking, group booking and weekly pass. GSRTC has also enhancing the free passenger luggage limits from 15 kg to 25 kg and raised the free travel age of children from 3 years to 5 years. It is also providing local bus fare on express routes up to a limit of 30 kms.

These activities of the corporation may appear redundant expenses especially for a company which is posting losses in its balance sheets. However when viewed from the perspective of social responsibility of a state corporation that is obtaining government subsidies, the actions make ample sense. Also in this process, the corporation is creating social awareness about itself and seeding the future citizens about its utility in the socio-economic framework. Finally, in terms of psychological impact, costs incurred in good citizenship behaviour have a greater impact than similar costs being incurred through other means like advertisements in electronic media.

Information Technology based Initiatives by GSRTC

The Corporation has extensively implemented e-Governance and has chalked out a road map till 2011-12. The primary purpose of implementing the e-Governance system is to enhance operational effectiveness and administrative control through seamless information flow and real time data transmission. The various initiatives taken by the corporation are stated below:

Integrated Depot Management System: GSRTC has plans to roll out Integrated Data Management System (IDMS) in all of its 126 depots. Currently the pilot testing is carried out at Ahmedabad with roll out at 25 depots. Within the next two years another 50 depots each will be brought under this system. The total project costs Rs. 100 Lakhs and the benefits include paper less working, non

duplication of work, automatic maintenance of reports and records and accessibility of MIS from any place and at any time as the system is web based.

MPLS-VPN Connectivity: This is rolled out at 150 locations over a period of 2 years at Rs. 1.5 Crores. Allied to this initiative is the Online Passenger Reservation System at the 125 bus stations as well as through internet and booking agents. The cost of this initiative is Rs. 100 lakhs. It is under implementation and result in benefit of passengers who can buy tickets for any two destinations from Bus Counters, Agents or online. For GSRTC this implies instant revenue and less scope of on board pilferages.

RFID/Smart Card Pass: Currently the corporation has issued 1 lakh cards to daily commuters from 35 depots at the cost of Rs. 100 lakhs. Over the next two years 3 lakh daily commuters and students from all the depots will be covered at an aggregate expenditure of Rs. 7 Crores. These cards have multiple usage including permanent data storage and efficient data generation, easy renewal, prevention of misuse of passes and conversion of the same to Cash Cards at GSRTC buses for the purpose of travelling. This effort is likely to retain the commuters for an extended period of time.

Personal Management System: This is to be implemented in Central Office and all divisional offices at an estimated cost of Rs. 50 Lakhs. This centralizes the personal data of the information and shall minimize transaction costs and eliminate duplication of efforts. All administrative activities would be available to the authorized personnel at any point of time thereby minimizing reporting errors.

Automated Driver Testing Systems: This facility is to be set up at Chandola, Ahmedabad at a cost of Rs. 50 Lakhs. This shall enhance transparency in driver recruitment process, minimize human interferences and shall generate revenue through contracting out the facility to RTO and other driver training centres. The operating cost for the corporation shall be covered by test fees.

Online Fleet Management and Public Information System (PIS): The pilot is tested out at 100 buses and at 5 PIS for an expenditure of Rs. 15 Lakhs. Over a period of 2 years about 2000 long distance buses shall have the Online Fleet management systems along with PIS at 100 major stations. The total cost incurred is Rs. 4.65 Crores. This is the single most important system which shall effectively and efficiently replace the traffic checkers. This system shall allow online tracking and speed monitoring of the buses, driving habits of the drivers, immediate reliefs in case of breakdowns, monitoring of unauthorized halts and route diversions, details of expected time of arrival and automated announcements at the stations. This shall imitate the tracking system of aeroplanes for GSRTC buses.

Online Vigilance and Surveillance Systems at bus stations and workshops: This is planned for 60 major bus stations, 5 workshops, 16 divisional workshops and 125 depot workshops. The aggregate cost is Rs. 4.95 Crores. This is complementary to Fleet management system for bus stations and workshops. Besides employee surveillance, this shall help in mitigating social crimes like pickpockets, touts and other unsocial activities in bus stations. This shall also increase the efficiency at the workshop.

GSRTC is in the process of extensively using the IT & ITeS infrastructure to turn around and face competition. Its strategic investments in ITeS initiatives is likely to translate into manifold benefits and sustained sources of income, cost savings and means to improve efficiency and effectiveness.

Initiatives towards fair bargaining with Government

GSRTC is dependent on Government subsidies to offset the costs incurred under USO norms. On an average the subsidy comes to around Rs. 361 Crores which however is often irregular and prone to book adjustments against other accounts payable. GSRTC is planning an initiative of linking this subsidy to its performance efficiencies with penal clauses built in for slippages in case of missed targets.

To elaborate, GSRTC plans to propose a 200% penalty for 1% (or equivalent) slippage on any of the parameters that defines its operational efficiencies. The purpose is to ensure that the corporation does not become complacent on receipt of public money and that Govt's continued assistance is subject to continued improvements (in the subsequent parameters) initiated by GSRTC. The parameters identified by the corporation includes *fuel efficiency* (in kmpl), *vehicle productivity* (in km per bus per day or kmbd), *crew productivity* (in kmbd), *bus breakdown rate* (in absolute numbers per 10,000 km travelled by the bus), *fleet utilization* as percentage of total number of buses and *non tariff income* which is a financial measure of alternative scopes of income generated by the corporation. The proposed operational efficiency parameters of GSRTC are presented in Table T10.

GSRTC's initiatives are aimed at providing the Government a clear direction and an objectively defined set of criteria to assess its performance and then provide subsidies. It also affords an opportunity to compare the performance of the corporation against the best in the industry, in the context of the STUs. It is important to compare amongst same category as the constraints present within the same category are likely to be same. The detailed methodology arrived at the aforementioned efficiency measures are appended in Appendix A1.

RELATIVE EFFICIENCY MEASURE OF GSRTC VIS-A-VIS OTHER STUS

The results of the in-house initiatives undertaken by GSRTC become apparent when compared against the better performing peer STUs. The comparison is shown in Table T11. It is evident that in terms of efficiency parameters like Fleet Utilization, GSRTC is behind all the other STUs which may be due to higher percentage of overaged buses (therefore liable to breakdowns) and higher average age of the buses. The same reason can also explain the higher cost of operation – given that older buses are less fuel efficient and are prone to higher maintenance cost.

Similarly, in terms of PAT the loss can be partly attributed to higher Passenger Tax on GSRTC. Support to this can be found with respect to Rajasthan STU which is also incurring loss due to higher tax incidences. A quick comparison of the state wise Passenger Tax (PT) reveals that Tamil Nadu has 0% PT while Karnataka and Andhra Pradesh has 7% and 7.5% PT while both Rajasthan and Maharashtra has 12% PT. Gujarat has the highest PT, pegged at 17.5% and which partly explains a positive PBT and a negative PAT for the corporation.

However, given these shortcomings, GSRTC has shown candour in its fuel consumption efficiency where it scores the highest amongst its peers. Also, in terms of staff efficiency, given the skewed nature of its staffs, it occupies exactly the middle position with respect to its peers. The staff efficiency is likely to increase with the conscious effort to remove the skewness and bring in multi-roles like driver cum conductors.

At the aggregate level, in spite of incurring losses, the corporation is showing signs of recovery and transformation, provided the Government, as the sole promoter of the firm, contributes towards that initiative.

Proposed Government Assistance and Initiatives

The principal impediments for a successful turnaround of GSRTC are four fold namely: the regulatory impediments, the aggregate economic prosperity of the existing commuters, the unfair competition from private operators and its own internal dissonances. The same is represented in Figure F1. GSRTC has taken a number of initiatives (or has planned for the same) to mitigate its internal dissonances and attempt to retain existing and acquire newer commuters. However, it is dependent on the Government to help with respect to regulatory impediments and uneven private competition. Some of the proposed Government initiatives sought by GSRTC are described below.

Equity Divestment of Corporation to Company

Presently GSRTC operates as a departmental endeavour of the Surface Transport Department of Government of Gujarat. It is fully held by the Government and has to comply strictly with the rules and regulations of the department. Its management has limited autonomy and any managerial decision taken by the board of the corporation is subject to bureaucratic approval.

While on the brighter side, decisions are collective and vetted through multiple checks and balances, on the darker side it leads to inordinate delay in responding to dynamic and competitive environment. Even some of the urgent needs of the corporation at the operational level like purchase, recruitment and tariff fixation get delayed by bureaucratic involvement. Table T12(a & b) provides a flavour of the losses incurred by the corporation due to delays in implementing passenger tariffs and non availability of manpower leading to idle/cancelled bus kms.

An alternative to this impasse is through limited divestment of Government's equity holding and registering the corporation as a company under the Company's Act. Limited divestment is likely to bring in market discipline into the corporation and shall enable it to have higher operational autonomy if not full autonomy to formulate strategies and frame policies.

Another advantage of introducing public or institutional share holders (or their representatives) into the board is the importation and cross fertilization of best industry practice into the corporation. Areas of further improvement can possibly be identified and steps initiated to implement them.

Last but not least, equity divestment shall infuse capital into the corporation and at the same time may provide the government the justification to stop direct subsidies which may not be required if requisite capital infusion takes place post divestment.

Formation of Limited Liability (Subsidiary) Company

GSRTC is a state corporation, instituted by the State Government, with limited transactional power and fully dependent upon the policies of the Government. This creates operational level inflexibilities for the corporation even in terms of competitive responses. One of the ways to overcome this impediment is to create a Limited Liability Company (LLC) as a subsidiary to the corporation, which shall be registered under section 617 of the Companies Act, 1956, thereby giving the Government (through GSRTC) majority stakes in the LLC. However, there has to be substantial public holding to bring in corporate governance culture.

This subsidiary LLC shall be vested with responsibilities of entering and managing risky businesses which had traditionally not been part of GSRTC's core competencies. Thus the LLC shall manage the following:

- Creation and administration of the PPP's that shall come up in the surplus real estate assets of the corporation
- Ensure a steady revenue stream from the non-core projects
- Shall be charged with earning revenues from non traffic operations like Advertisements, Market Survey, New ventures.
- Represent GSRTC in the PPP, thereby dissociating the corporation from the risks of the PPPs.
- Formulate procedures in auctioning out routes to the private players
- The subsidiary can be used in encouraging the competing private transport operators to be equity partners – thereby converting the competitors into collaborators for the corporation as a whole
- Any other venture or spin off projects that the Corporation may contemplate and need to carry out – but without involving the structure of the corporation

The Subsidiary LLC shall be manned by professionals from various functional disciplines and be headed by a professional who is answerable to the management of the corporation.

Financial Revival Package

GSRTC is dependent on Government subsidy to maintain its operations under USO norms. Moreover, the Corporation being obliged to adhere to statutory norms, it has accrued financial liabilities to the tune of Rs. 1731.59 Crores out of which Rs. 648.35 Crores are statutory liabilities like Provident Fund Contributions and its accrued interests @ 12%.

The other dues include Gratuity towards retired employees which stands at Rs. 15.08 Crores, MACT claims @ Rs. 52.75 Crores, Motor Vehicle Tax and Government guarantee fees at Rs. 15.41 Crores and Rs. 11 Crores respectively. However the largest portion constitutes of Passenger Tax and its Arrears which stands at Rs. 339.05 Crores.

The second set of liabilities constitutes of the Employee dues totalling to Rs. 146.00 Crores which included Rs. 48 Crores towards pay commission wages involving 50% merger of DA, and towards medical bills, leave salary and settlement arrears.

The third liability comes from Govt loans which stand at Rs. 850.28 Crores. There is also a debenture bond of Rs. 1.1 Crores @ 11.5% interest. The remaining two groups of liabilities consist of Court matters with respect to different government departments and lease rental liabilities which stand at Rs. 45.20 and 40.66 Crores respectively. Thus of the total liability of Rs. 1731.59 Crores, more that two-thirds i.e. Rs. 1189.33 Crores is directly related to the Government due to its policies. Table T13 provides a consolidation of the financial liabilities of the corporation.

The fourth and the final set of liability come from the implementation of the 6^{th} Pay Commission Recommendations. Through this recommendation, the corporation has to pay its employees an excess amount of Rs. 250 Crores per year and an arrear payment of Rs. 600 Crores to be paid in 5 instalments beginning 2008 – 09.

Given the above financial obligations, the corporation's liabilities can be classified broadly under two headings namely, one time liabilities (i.e. the loans, employee liabilities including arrear payment) and continuous liabilities viz. the taxes and increased wage payout. Given these financial obligations, the corporation through operational effectiveness par se, cannot turn around. It needs Government interventions. The corporation seeks the following relief from the Government:

Conversion of Debt into Equity: GSRTC expects that the aggregate Government loan of Rs. 850.28 Crores be converted into equity and thus written off from the books of account. Technically, the Government would get interest out of the loan given to the corporation which it is bound to pay over a finite time horizon. If the loan amount is to be converted to Equity, then the Government, being the sole promoter should get dividends – assuming the corporation starts making money. Historically, all profit making PSUs are known to give dividends in time and dividend rates often exceed the interest rates of loans. Secondly, equity investment is in perpetuity unless the share holder decides to liquidate the shares and cash out. Even then the price realization for a revived company with no or minimal debt would be much higher than highly leveraged firm. Thirdly, if government decides to divest some of its shares, the returns as stated before would be much higher. Therefore financially also, it makes sense to convert the debt to equity.

Reduction and Waiver of Taxes: GSRTC has taken up the initiative of engaging the Government to reduce the existing 17.5% Passenger Tax to a more manageable level between 5% and 7.5%. This will help reduce the perennial disadvantage which it faces vis-à-vis its private competitors. Therefore it seeks relief on grounds of fair and equitable treatment. With respect to MV Tax and Government Guarantee fees, it wants an exemption as it is part of the government and such taxes only increase the transaction cost.

Charging of Toll Tax: With respect to Toll Tax, the corporation had been paying the same without passing the burden to the passenger. There had been an increase of 281% in Toll Tax from Rs. 8.39 Crores (2003-04) to Rs. 27.01 Crores (2009-10). The estimate for 2010-11 stands at Rs. 32 crores. Toll Taxes have increased at the rate of 14% annually over the past few years. Given that the passengers primarily benefit from usage of Toll Imposed Expressways, the Government allowed GSRTC to impose Re. 1.00 per ticket from the passengers. This however covers only 40% of the cost. GSRTC proposes that the entire burden of Toll Tax should be passed on to the passengers thereby freeing its balance sheet from avoidable expenses.

Disbursal of Past Receivables: Another financial obligation with respect to the Government lies with disbursal of past payments. Thus GSRTC is likely to get Rs. 342.70 Crores as short receipt of subsidies, Rs. 198.92 Crores as current subsidy receivable and Rs. 150 Crores as special financial assistance to aid payment of standing dues. Thus GSRTC is supposed to get Rs. 692.0 Crores from the Government. GSRTC expects that the Government would show expediency in releasing the dues in a timely manner.

Loan adjustment is not advisable as investment (in the form of subsidy receipts) to the Corporation is likely to yield higher returns than that done on a zero balanced budget. Consequently, the corporation's profitability shall also rise with higher dividend payout to the Government.

Tariff Revision, limited Route Denationalization and Capital Infusion: GSRTC proposes to increase the passenger tariff by 9% with effect from October 2010. The additional revenue of Rs. 78 Crores p.a. shall partly offset the effects of increase in salary.

Further to pre-empt competition from private operators, GSRTC proposes to allow around 1000 contract carriages to operate as stage carriages in routes dedicated for GSRTC. The corporation proposes an increase of 125% Passenger Tax over the existing rates for Contract Carriages – with the corporation retaining 100% of the P Tax as royalty.

Finally, to overcome financial burden out of wage revision, the corporation proposes to create a corpus under the name of GSRTC Revival Capital Fund or a financial corporation styled Gujarat

Transport development Financial Corporation (in line with Tamil Nadu Transport Development Financial Corporation). It expects capital infusion from the government to the tune of Rs. 600 Crores which is equivalent to the wage arrears under the 6th Pay Commission. Further, it prays a 5 year moratorium on interest payment on this fund. It expects to pay the arrears from this fund extended over 5 years, clear the balance sheet of the losses and start repaying after the moratorium period. The success of this proposal however is fully dependent on the decision of the Government to accept or reject.

The possible effects of these proposed initiatives with respect to Government interventions are presented in the next section in details.

POSSIBLE IMPLICATIONS OF GOVERNMENT INTERVENTIONS TO GSRTC

Given that GSRTC has shown initiatives towards operational efficiency and effectiveness and given that there are limits to the same with regards to organizational transformation, therefore interventions by the Government assumes primary importance. However, the extent of intervention and its outcome is a matter of debate and discussion. A fair estimate of the outcome can be gauged iteratively by modifying the factors and extent of intervention. The factors influencing the financial restructuring decision of the corporation are (i) No Policy Intervention **(NPI)** by the Government i.e. GSRTC can manage on its own, (ii) Wage Revision **(WR)** on account of implementation of 6th Pay Commission, (iii) Debt Equity Swap **(DES),** (iv) Relaxation of Motor Vehicle and Toll Tax **(MVTT),** (v) Reduction of Passenger Tax **(PT)** to either 5% or 7.5%, (vi) Tariff Hike **(TH)** to 9% to compensate for wage increase, (vii) Capital Infusion with 5 years Moratorium **(CILM5)** on loan repayment, and (viii) Partial Route Denationalization **(PRD).**

With these factors, ten new options are generated and their outcomes are presented over a six year period beginning from 2009-10 to 2014-15. The ten options are as follows:

Option 1. NPI & WR

Option 2. DES & WR

Option 3. Reducing Passenger Tax (PT) @ 5% & WR

Option 4. PT @ 5%, MV & Toll Tax (MVTT) @ 0% & WR

Option 5. PT @ 5%, MVTT @ 0%, 9% Tariff Hike (TH) & WR

Option 6. PT @ 5%, MVTT @ 0%, 9% TH, CILM5 & WR

Option 7. PT @ 7.5%, MVTT @ 0%, 9% TH, CILM5, DES & WR

Option 8. PT @ 7.5%, MVTT @ 0%, 9% TH, CILM5, PRD & WR

Option 9. PT @ 5%, MVTT @ 0%, 9% TH, DES, PRD & WR

Option 10. PT @ 5%, MVTT @ 0%, 9% TH, CILM5, DES, PRD, WR

The ten options and their outcomes are presented in Table T14 (a to j) with Option 1 being Table T14a. The base projection is the no intervention – no wage increase scenario as captured in Table T3 and the data for the same being provided by GSRTC.

It is evident from the projections that Option 10 provides a satisfactory combination of interventions that will serve the twin purpose of cleaning the losses from the balance sheet of the corporation and generating sufficient profit to pay the loan on account of revival fund. Prima Facia this option may appear conservative – however factoring in the extraneous circumstances in which the public sector organizations operate and their overarching obligations towards servicing the citizens, this margin is required.

A FRAMEWORK OF STRATEGIC TRANSFORMATION OF GSRTC

The factors impeding the transformation of GSRTC can be summarized as (i) Regulatory Impediments, (ii) Aggregate Economic Prosperity of the Commuters, (iii) Competition from the Private Operators and (iv) Internal Dissonances – which includes demands for wage revision in time of duress.

While some of the problematic factors are, to some extent, within its control like internal dissonances, some lies in the domain of its holding authority – the Government and over which GSRTC cannot exercise sufficient control. There are yet other factors like economic prosperity of the commuters over which it does not have any influence. It can at best aspire to match up with the aspiration of the commuters and thereby harvest the economic prosperity of the commuters to its advantage.

However, GSRTC has taken a number of initiatives, of late, to extend its zone of influence to control the internal and external dissonances. It has undertaken extensive restructuring exercises to even out the internal dissonances at the same time control the competitive pressures. For example, GSRTC has undertaken initiatives like Financial and HR Restructuring along with Infrastructural initiatives to tackle internal dissonances and fit with the economic prosperity of the customers. Similarly, it has undertaken administrative and operational restructuring exercises to address competitors and regulatory issues. It has also taken steps in an effort to convince the primary stakeholders of its intents to attain a transformation. This however is insufficient. The corporation needs to mobilize the Government's support in terms of the financial packages to complete its strategic transformation.

We refer to the aforementioned sequence of activities undertaken by GSRTC as the "Hammer and Anvil Strategy" where the restructuring exercises like administrative, operational, financial and human resource restructuring are the foundations or Anvil and the infrastructural initiatives and Government's financial packages are the Hammer. While the Anvil is the foundation which is a necessary prerequisite for the transformation process, the Hammer is the primary mover which makes the Transformation to Work. The Government's Financial Interventions and the IT Implementation (for effective supervision) are therefore the Hammer which will make the Strategic Transformation to happen. The strategic transformation of the corporation, including dealing with its threats, will be complete once the financial package is in place. The Hammer and Anvil Strategic Plan of GSRTC is presented in Figure F2.

Table T1: Segment Wise Concessions

Sl. No.	Segment Description	Relief %	Remarks	Opportunity Cost of GSRTC p.m.
01	Students	82.50	Free Pass to Village Girl Students	685000 x Rs10 x 2 x 22x0.825 = Rs 24,86,55,000
02	Daily Passengers	50.00	Monthly/Quarterly Pass Scheme	
03	Visually Impaired	100.00	With 1 Assistant	
04	Cancer Patient	50.00	With 1 Assistant	(44525 x Rs.10 x 2 x 22 x 0.5) x 2 = Rs. 1,95,91,000
05	Eye Donor/ Physically Challenged	100.00		217000 x Rs. 10 x 2 x 22 x 1 = Rs. 9,54,80,000
06	Press/Radio/TV Reporter	100.00	Unlimited Mileage in Gujarat	
07	Freedom Fighter & their Widows	100.00	With 1 Assistant	

Table T2: Trip wise Analysis of Profitability and Loss of GSRTC[4]

Financial Parameters	Trip Description (absolute numbers)			In Percentage
	Ordinary	Express	Total	
Not Covering Diesel Cost	11212	339	11551	27%
Not Covering Operational Cost	17723	250	17973	43%
Not Covering Divisional Cost	2239	1394	3633	09%
Earning above Divisional Cost	6857	2002	8859	21%
Total Trips			42016	100%

Table T3: Expenditure Projection of GSRTC for the period (2009 – 2015)[5]

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Operating Cost (in Crores)						
Staff	630.78	651.64	677.95	713.24	759.45	817.23
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax	237.89	263.21	292.05	322.33	356.71	394.76
MV & Toll Tax	20.51	21.33	22.18	23.07	23.99	24.95
Other Expenses						
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend.	1867.88	1990.13	2128.57	2276.19	2445.99	2635.82
Total Income	1852.41	2014.15	2197.42	2389.57	2606.54	2844.88
Margin/Deficit	-15.47	24.02	68.84	113.38	160.54	209.07
Interest Payable	70.12	73.41	73.69	77.92	71.58	65.23
Margin/**Deficit**	**-85.59**	**-49.39**	**-4.85**	35.46	88.96	143.84

[4] Source: GSRTC

[5] Source – Internal projections of GSRTC

Table T4: Fleet Position at GSRTC

Year	Fleet Held	% of over-aged bus	New Diesel Bus inducted	New CNG bus inducted	Vehicles discarded
2000-01	10048	13.9%	700	-	1953
2001-02	9531	17.3%	-	-	1465
2002-03	9209	24.3%	-	-	371
2003-04	8820	50.9%	-	-	303
2004-05	8164	78.4%	10	-	738
2005-06	8277	80.2%	1000	190	420
2006-07	8046	74.7%	700	300	1379
2007-08	8069	53.1%	1000	500	2052
2008-09	7628	50.1%	542	460	477

Table T5 – Cost Comparison between Diesel and CNG Buses (over 8,00,000 km)

Parameter (Initial Cost)	**Diesel Bus**	**CNG Bus**	**Difference**
Chassis Cost (Rs.)	6,70,000	11,70,000	5,00,000
Body Cost (Rs.)	5,30,000	5,50,000	20,000
Total Cost (Rs.)	12,00,000	17,20,000	5,20,000
Parameter (Recurring Cost)			
Interest Cost (Rs.)	3,01,500	5,26,500	2,25,000
Depreciation (Rs.)	5,20,000	10,20,000	5,00,000
Periodical Engine Oil Change/Mat. Cost (Rs.)	29,261	1,10,880	81,619
Fuel Cost (Rs.)	**49,60,870**	**44,88,163**	**(-) 4,72,707**
Periodical Spark/H.T. Cable/ L.P.R Filter Cost (Rs.)	NA	1,39,630	1,39,630
Cat.Converter Cost (Rs.)	NA	7,40,000	7,40,000
Engine Repair Cost	48,000	92,000	44,000
Radiator Cost (Rs.)	8,000	10,000	2,000
Total in (Rs.)			**17,79,542**

Table T6 – Man Power Position in Various Categories at GSTRC[6]

Category	Sanction	Working	Short Fall	% Short fall	Year of Retirement				Total strength by 2012 (% short fall)
					2009	2010	2011	2012	
Officers	467	198	269	58	19	20	16	16	127 (73%)
Admin	7224	4113	3111	43	201	362	328	334	2888 (60%)
Traffic	1681	1386	295	18	92	70	70	38	1116 (34%)
Mechanic	12778	5941	6837	54	657	629	503	464	3688 (71%)
Driver	16289	15196	1093	7	1030	1168	1061	1130	10807 (34%)
Conductor	16224	14540	1684	10	1137	1086	1092	1059	10166 (37%)
Total	**54663**	**41374**	**13289**	**24**	**3136**	**3335**	**3070**	**3041**	**28792 (47%)**

[6] Source – GSRTC's Internal Estimate

Table T7 – Population to Bus Ratio during Formative Years of Gujarat

Year	Population in lacs	Average vehicles on road	Ratio (population/bus on road
1960-61	206.00	1174	17547
1970-71	267.00	2896	9220
1980-81	341.00	5168	6598
1990-91	413.00	6733	6134
2000-01	506.71	8573	5911
2009-10	624.00	6514	9579

Table T8: Proposed Administrative Merger of Divisions and Depots
The merger plan of the divisions is as follows:

Sr. No	Division	To be merged with
1.	Bharuch	Surat, Baroda
2.	Amreli	Bhavnagar, Junagadh
3.	Jamnagar	Rajkot
4.	Valsad	Surat
5.	Godhra	Vadodara, Nadiad
6.	Palanpur	Mehsana

Merger Plan of depots:

Sr. No	Depots	To be merged with	Sr. No	Depots	To be merged with
1.	Bagasara	Amreli, Dhari, Savarkundla	13	Jasdan	Rajkot, Gondal
2.	Rajula	Una, Mahuva, Savarkundla	14	Bareja,	Dholka, Ahmedabad, Chandola
3.	Rapar	Bhachau	15	Bavla	Sanand, A'bad. Dholka, Chandola
4.	Naliya	Nakhatrana	16	Matar	Kheda
5.	Mundra	Anjar, Mandvi, Bhuj	17	Mahudha	Nadiad, Kheda, Dakor, Kapadvanj
6.	Barvala	Bhavnagar, Dhandhuka, Limbdi	18	Karjan	Vadodara, Bharuch
7.	Botad	Bhavnagar, Dhandhuka, Limbdi	19	Zagadhiya	Rajpipla, Bharuch
8.	Talaja	Palitana, Mahuva, Bhavnagar	20	Prantij	Himatnagar, Dehgam
9.	Dhrol	Jamnagar, Rajkot	21	Bantva	Junagadh, Porbandar, Keshod
10	Jamjodhpur	Jamnagar, Upleta	22	Dhoraji	Jetpur, Upleta
11	Chotila	Rajkot, S'nagar, Vankaner, Limbdi	23	Chanasma	Patan, Harij, Mehsana, Bechraji
12	Dhangadhra	Surendranagar, Morbi	24	Kheralu	Vadnagar, Visnagar, Unza

Table T9: Projected Expansion of the Corporation on Operational Parameters

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Schedules	6792	7053	7335	7628	7933	8251
Vehicles	7535	7836	8150	8476	8815	9167
Effective Km (in Crores)	106.60	111.21	116.41	121.21	126.55	132.12
Vehicle Utilization (km)	421	423	425	427	429	431
Crew Utilization (km)	249	250	251	253	254	255

Table T10: Proposed Operational Efficiencies and Related Penalties

Item Description	Industry Average	Proposed Standard of GSRTC	Current Status	Penalty
Fuel Efficiency (Diesel Bus)	5.15 kmpl	5.40 kmpl	5.39 kmpl	Rs. 2.217 Crores
Vehicle Productivity	373 kmbd	390 kmbd	389 kmbd	Rs. 6.4 Crores
Crew Productivity	178 kmbd	173 kmbd	173 kmbd	Rs. 2.76 Crores
Bus Breakdown	0.15/10000 km	0.32/10000 km	0.33/10000 km	Rs. 36.74 Lakhs per 0.01 additional breakdown over 10000 km.
Fleet Utilization	95.01%	85.23%	83.23%	GSRTC plans to increase fleet utilization by 2% y.o.y. for 5 years. Penalty to be imposed after 5th year @ Rs. 75.46 lakhs per slippage percentage.
Non Tariff Income	Rs. 12.31 Cr. ('09-'10)	Rs. 13.54 Cr. (10% increase p.a. y.o.y.)	Rs. 12.19 Crores	Rs. 2.70 Crores per % slippage from target

Table T11: Relative Efficiency of GSRTC vis-à-vis other STUs (2008-09)

Sl. No	Description	APSRTC	MSRTC	GSRTC	UPSRTC	RSRTC	Karnataka (Aggregate)	Tamil Nadu (Agg.)
1.	Total Revenue (Paise/KM)	1644	2316	1755	1817	1838	1914	1604
2	Total Cost (Paise/KM)	1584	2176	1911	1772	1910	1901	1807
3	Operating Ratio	108	81	94	107	97	106	115
4	PBT in Lakhs (Paise/KM)	42253 (158)	81664 (450)	8779 (87)	28108 (338)	5814 (207)	18714 (48)	-33323 (-134)
5	PAT (Paise/KM)	41	140	-157	46	-72	13	-203
6	Average Numbers of Buses	20375	15695	7628	6831	4537	14411	15372
7	Average No. of Buses on Road	20292	14797	6697	6471	4246	13171	14695
8	% Fleet Utilization	99.6	94.3	83.23	94.7	93.6	91.4	95.6
9	Average Age of Buses (Yrs)	-	4.10	6.89	4.60	5.26	4.07	4.85
10	% of Overaged Buses	-	-	50.11	37	14.81	17.76	15.38
11	% Load factor	72.3	48.6	65.7	63	71.8	65.8	80.1
12	Pass/Bus/day	690	444	358	162	239	403	1010
13	Eff KM/Staff/Day	64.64	50.71	66.46	73.13	79.86	65.19	69.66
14	Fuel Performance (KM/Lt)	5.25	4.93	5.53	5.32	4.98	5.08	5.30
15	No. of Total Fatal Acc.	1019	401	210	295	192	543	1367
16	Estm Av Price/Lit Fuel	31.02	37.15	36.84	35.95	32.91	38.11	36.18

Table T12 (a) – Loss of Revenue due to delays in Tariff Implementation

Date of Proposal	Date of Approval	Time taken in Days	Revenue Loss (Rs. in crores)
21.07. 2005	14.11 2005	116 days	15.89
10.06. 2006	15.07 2006	35 days	4.32
09.06. 2008	23.06 2008	14 days	2.76
22.03.2010	05 05 2010	44 days	6.82
03 07. 2010	10 08, 2010	38 days	3.83

Table T12 (b) – Revenue Loss due to idle/Cancelled KM due to Staff Shortage

Year	Sanctioned schedules	Sanctioned crew	Available crew	Vacancies	EPKM	Cancelled kms in lacs	Loss of Revenue (Rs. in Crores)
06-07	7125	34350	33897	453	12.11	248.58	30.10
07-08	7010	33208	31794	1414	12.30	298.60	36.73
08-09	6850	32300	29869	2431	13.19	350.87	46.28
09-10	6850	32300	29609	2691	13.42	544.24	73.04
10-11	6850	32300	28155	4145	14.93	194.36	29.02

Table T13: Aggregate Financial Liability of GSRTC

Sl. No.	Item Description	Amount of Liability (Rs. Crores)
	Employee related Liability	
01	Provident Fund	Rs. 648.35
02	Gratuity Liability	Rs. 15.08
03	Pay Commission Wages/arrears	Rs. 48.00
04	Medical Bills, Leave Salary, Settlement Arrears	Rs. 98.00
	Government Loans	
05	Government Loans	Rs. 850.28
06	Debenture Bonds	Rs. 1.1
07	Govt. Dept. related Court matters	Rs. 45.20
08	Lease Rental Liabilities	Rs. 40.66
	Government Taxes	
09	MACT Claims	Rs. 52.75
10	Motor Vehicle Tax	Rs. 15.41
11	Government Guarantee Fees	Rs. 11.00
12	Passenger Tax and Arrears	Rs. 339.05
	TOTAL LIABILITY	Rs. 1731.59 Crores

Table T 14 (a) - Six Years Projection of Income and Expenditure under No Policy Intervention and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total Income in Crores	1859.72	2022.43	2206.78	2399.73	2618.44	2859.18
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Arrear Payment of Rs. 600 Crores to be spread over 5 installments beginning 2008-09	***0.00***	***360.00***	***120.00***	***120.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax	237.89	263.21	292.05	322.33	356.71	394.76
MV & Toll Tax	20.51	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	2117.87	2600.14	2498.56	2646.18	2695.99	2885.81
Margin/Deficit in crores	-258.15	-577.71	-291.78	-246.45	-77.55	-26.63
Interest Payable	70.12	73.41	73.69	77.92	71.58	65.23
Margin/Deficit in crores	***-328.27***	***-651.12***	***-365.47***	***-324.37***	***-149.13***	***-91.86***

Table T 14 (b) - Six Years Projection of Income and Expenditure with Debt Equity Swap and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total Income in Crores	1859.72	2022.43	2206.78	2399.73	2618.44	2859.18
Expenditure						
Staff	880.78	901.64	927.95	963.24	1009.45	1067.23
Arrear Payment of Rs. 600 Crores to be spread over 5 installments beginning 2008-09	0.00	360.00	120.00	120.00	0.00	0.00
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax	237.89	263.21	292.05	322.33	356.71	394.76
MV & Toll Tax	20.51	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	2117.87	2600.14	2498.56	2646.18	2695.99	2885.81
Margin/Deficit in crores	-258.15	-577.71	-291.78	-246.45	-77.55	-26.63
Interest Payable	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
Margin/Deficit in crores	**-258.15**	**-577.71**	**-291.78**	**-246.45**	**-77.55**	**-26.63**

Table T 14 (c) - Six Years Projection of Income and Expenditure with 5% P Tax and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total Income in Crores	1859.72	2022.43	2206.78	2399.73	2618.44	2859.18
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Arrear Payment of Rs. 600 Crores to be spread over 5 installments beginning 2008-09	***0.00***	***360.00***	***120.00***	***120.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 5%	***67.97***	***75.20***	***83.44***	***92.09***	***101.92***	***112.79***
MV & Toll Tax	20.51	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1947.95	2412.13	2289.95	2415.94	2441.20	2603.84
Margin/Deficit in crores	-88.23	-389.70	-83.17	-16.21	177.24	255.34
Interest Payable	70.12	73.41	73.69	77.92	71.58	65.23
Margin/Deficit in crores	***-158.35***	***-463.11***	***-156.86***	***-94.13***	***105.66***	***190.11***

Table T 14 (d) - Six Years Projection of Income and Expenditure with 5% P Tax, 0% MV+Toll Tax and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total Income in Crores	1859.72	2022.43	2206.78	2399.73	2618.44	2859.18
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Arrear of Rs. 600 Crores spread over 5 installments beginning 2008-09	***0.00***	***360.00***	***120.00***	***120.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 5%	***67.97***	***75.20***	***83.44***	***92.09***	***101.92***	***112.79***
MV & Toll Tax	0.00	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1927.44	2412.13	2289.95	2415.94	2441.20	2603.84
Margin/Deficit in crores	-67.72	-389.70	-83.17	-16.21	177.24	255.34
Interest Payable	70.12	73.41	73.69	77.92	71.58	65.23
Margin/Deficit in crores	***-137.84***	***-463.11***	***-156.86***	***-94.13***	***105.66***	***190.11***

Table T 14 (e) - Six Years Projection of Income and Expenditure with 5% P Tax, 0% MV+Toll Tax, 9% Tariff Hike and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Tariff Income	1548.87	1712.82	1900.52	2097.55	2321.26	2568.87
Govt Subsidy	361.62	369.46	376.85	384.39	392.08	399.92
Total Income in Crores	***1910.49***	***2082.28***	***2277.37***	***2481.94***	***2713.34***	***2968.79***
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Arrear Rs. 600 Crores spread over 5 installment from '08-'09	***0.00***	***360.00***	***120.00***	***120.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 5%	***67.97***	***75.20***	***83.44***	***92.09***	***101.92***	***112.79***
MV & Toll Tax	0.00	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1927.44	2412.13	2289.95	2415.94	2441.20	2603.84
Margin/Deficit in crores	-16.95	-329.86	-12.58	66.00	272.15	364.95
Interest Payable	70.12	73.41	73.69	77.92	71.58	65.23
Margin/Deficit in crores	***-87.07***	***-403.27***	***-86.27***	***-11.92***	***200.57***	***299.72***

Table T 14 (f) - Six Years Projection of Income and Expenditure with 5% P Tax, 0% MV+Toll Tax, 9% Tariff Increase, Capital Infusion and 5 years Loan Moratorium and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Tariff Income	1548.87	1712.82	1900.52	2097.55	2321.26	2568.87
Govt Subsidy	361.62	369.46	376.85	384.39	392.08	399.92
Total Income in Crores	***1910.49***	***2082.28***	***2277.37***	***2481.94***	***2713.34***	***2968.79***
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Moratorium on Loan repayment	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 5%	***67.97***	***75.20***	***83.44***	***92.09***	***101.92***	***112.79***
MV & Toll Tax	0.00	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1927.44	2052.13	2169.95	2295.94	2441.20	2603.84
Margin/Deficit in crores	-16.95	30.14	107.42	186.00	272.15	364.95
Interest Payable	70.12	73.41	73.69	77.92	71.58	65.23
Margin/Deficit in crores	***-87.07***	***-43.27***	***33.73***	***108.08***	***200.57***	***299.72***

Table T 14 (g) - Six Years Projection with 7.5% P Tax, 0% MV+Toll Tax, 9% Tariff Increase, Capital Infusion and 5 years Loan Moratorium, Debt Equity Swap and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Tariff Income	1548.87	1712.82	1900.52	2097.55	2321.26	2568.87
Govt Subsidy	361.62	369.46	376.85	384.39	392.08	399.92
Total Income in Crores	***1910.49***	***2082.28***	***2277.37***	***2481.94***	***2713.34***	***2968.79***
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Moratorium of Loan Repayment	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 7.5%	***101.95***	***112.80***	***125.16***	***138.14***	***152.88***	***169.18***
MV & Toll Tax	0.00	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1961.42	2089.73	2211.67	2341.99	2492.16	2660.23
Margin/Deficit in crores	-50.93	-7.46	65.70	139.95	221.19	308.56
Interest Payable	0.00	0.00	0.00	0.00	0.00	0.00
Margin/Deficit in crores	***-50.93***	***-7.46***	***65.70***	***139.95***	***221.19***	***308.56***

Table T 14 (h) - Six Years Projection with 7.5% P Tax, 0% MV+Toll Tax, 9% Tariff Hike, Capital Infusion and 5 years Loan Moratorium, Partial Route Denationalization and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Tariff Income	1548.87	1712.82	1900.52	2097.55	2321.26	2568.87
Route Denationalization Income @ 7.5% Tariff for 1000 Buses	***18.44***	***20.39***	***22.63***	***24.97***	***27.63***	***30.58***
Govt Subsidy	361.62	369.46	376.85	384.39	392.08	399.92
Total Income in Crores	***1928.93***	***2102.67***	***2300.00***	***2506.91***	***2740.98***	***2999.37***
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Arrear Payment of Rs. 600 Crores to be spread over 5 installments beginning 2008-09	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 7.5%	***101.95***	***112.80***	***125.16***	***138.14***	***152.88***	***169.18***
MV & Toll Tax	0.00	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1961.42	2089.73	2211.67	2341.99	2492.16	2660.23
Margin/Deficit in crores	-32.50	12.93	88.32	164.92	248.82	339.14
Interest Payable	70.12	73.41	73.69	77.92	71.58	65.23
Margin/Deficit in crores	***-102.62***	***-60.48***	***14.63***	***87.00***	***177.24***	***273.91***

Table T 14 (i) - Six Years Projection of Income and Expenditure with 5% P Tax, 0% MV+Toll Tax, 9% Tariff Increase, Partial Route Denationalization, Debt Equity Swap and Wage Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Tariff Income	1548.87	1712.82	1900.52	2097.55	2321.26	2568.87
Route Denationalization Income @ 7.5% P Tax to be collected by GSRTC for 1000 CC Buses	***18.44***	***20.39***	***22.63***	***24.97***	***27.63***	***30.58***
Govt Subsidy	361.62	369.46	376.85	384.39	392.08	399.92
Total Income in Crores	***1928.93***	***2102.67***	***2300.00***	***2506.91***	***2740.98***	***2999.37***
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Arrear Payment of Rs. 600 Crores to be spread over 5 installments beginning 2008-09	***0.00***	***360.00***	***120.00***	***120.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 5%	***67.97***	***75.20***	***83.44***	***92.09***	***101.92***	***112.79***
MV & Toll Tax	0.00	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1927.44	2412.13	2289.95	2415.94	2441.20	2603.84
Margin/Deficit in crores	1.49	-309.47	10.05	90.97	299.78	395.53
Interest Payable	0.00	0.00	0.00	0.00	0.00	0.00
Margin/Deficit in crores	***1.49***	***-309.47***	***10.05***	***90.97***	***299.78***	***395.53***

Table T 14 (j) - Six Years Projection of Income and Expenditure with 5% P Tax, 0% MV+Toll Tax, 9% Tariff Increase, Partial Route Denationalization, Capital Infusion and 5 years Loan Moratorium, Debt Equity Swap and Revision

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Tariff Income	1548.87	1712.82	1900.52	2097.55	2321.26	2568.87
Route Denationalization Income @ 7.5% P Tax to be collected by GSRTC for 1000 CC Buses	***18.44***	***20.39***	***22.63***	***24.97***	***27.63***	***30.58***
Govt Subsidy	361.62	369.46	376.85	384.39	392.08	399.92
Total Income in Crores	***1928.93***	***2102.67***	***2300.00***	***2506.91***	***2740.98***	***2999.37***
Expenditure						
Staff	***880.78***	***901.64***	***927.95***	***963.24***	***1009.45***	***1067.23***
Arrear Payment of Rs. 600 Crores to be spread over 5 installments beginning 2008-09	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***
Fuel	699.16	742.66	791.52	839.11	891.97	948.16
Tyre Tubes	53.97	56.87	60.12	63.23	66.67	70.30
Spare Parts	52.28	55.09	58.24	61.25	64.58	68.10
Interest & Debts	16.81	34.36	51.91	69.46	87.01	104.56
Passenger Tax @ 5%	***67.97***	***75.20***	***83.44***	***92.09***	***101.92***	***112.79***
MV & Toll Tax	0.00	21.33	22.18	23.07	23.99	24.95
Depreciation	83.34	91.30	100.35	109.70	120.26	131.83
Others	73.13	73.68	74.24	74.79	75.35	75.92
Total Expend. in Crores	1927.44	2052.13	2169.95	2295.94	2441.20	2603.84
Margin/Deficit in crores	1.49	50.53	130.05	210.97	299.78	395.53
Interest Payable	0.00	0.00	0.00	0.00	0.00	0.00
Margin/Deficit in crores	***1.49***	***50.53***	***130.05***	***210.97***	***299.78***	***395.53***

CHART C1: Trend of Bus Procurement by GSRTC

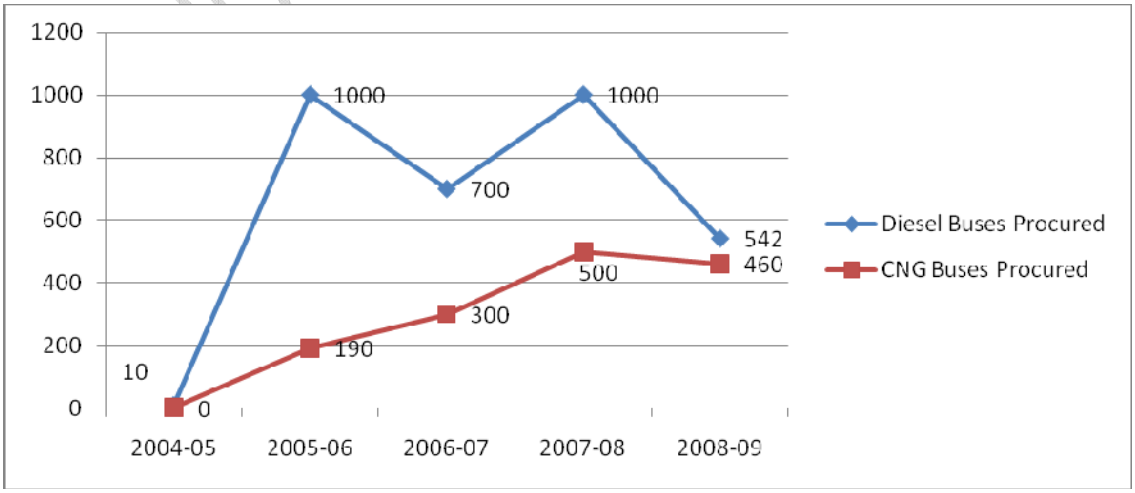

Figure F1: Impediments to GSRTC's Transformation

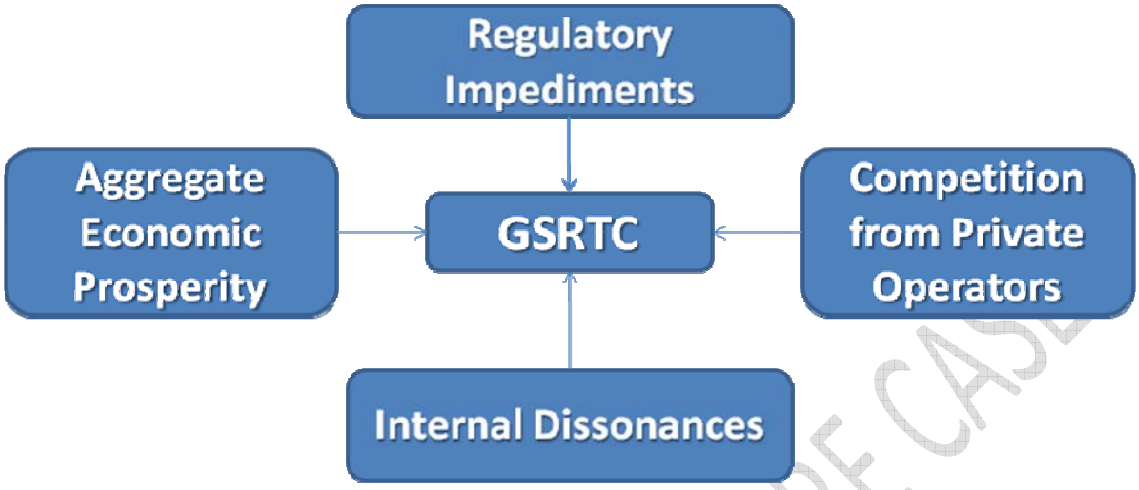

Figure F2: The Hammer and the Anvil Method of Turnaround Strategy