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BUS KARO

Bus Taxation Reforms – Deep Dive Analysis

- *Bengaluru Metropolitan Transport Corporation*
- *Uttar Pradesh State Road Transport Corporation*
- *Gujarat State Road Transport Corporation*

SHAKTI
SUSTAINABLE ENERGY FOUNDATION

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1. INTRODUCTION

In 2016, with support from Shakti Sustainable Energy Foundation, WRI India commenced an analysis of the extant taxation framework for bus-based public transport in India, primarily operated by Stata Transport Undertakings (STUs). The focal points of this study included the following aspects of public bus taxation in the country:

- The range of taxes levied on STUs in India;
- Whether fiscal demands on STUs have increased or decreased in the last decade, and the impact of these demands on the financial stability of these STUs;
- The extent of heterogeneity in taxation across states – in terms of the number of taxes levied on bus operations and their rates;
- The difference in the effective tax rates of private vehicles and public buses over their lifetimes;
- Whether best practices in public transport taxation abroad could be imported and applied to the Indian context.

The results of this analysis are summarized in the report titled 'Fiscal policies and taxation incentives for improved public bus systems in India'. A brief summary of the findings of this report is given below:

- Unlike metro rail operators which are exempted from almost all taxes, STUs are liable to pay as many as 13 different taxes on assets and day-to-day operations;
- While most STUs are aware of their direct tax outlay (such as Motor Vehicle Tax), there is minimal understanding of the financial impact of indirect taxes (such as GST on buses, spare parts, and duties on fuel consumed) on their operating costs;
- While the effective rates of direct taxes have, in general, remained relatively stable over the last decade, large state-wise variations in taxation have been observed (see below);
- As most taxes on motor vehicles are levied at the state level, there exists considerable variation (over 1,500%) in the effective tax rate on STU operations across states. This is a result of certain states choosing not to levy specific taxes on STUs, states using different methods to compute taxes for STUs, and states levying different tax rates on STU operations;
- Motor Vehicle Tax is levied on a lifetime basis for private vehicles, usually as a percentage of the vehicle's value. For STU buses, Motor Vehicle Tax is usually levied either quarterly or annually. When measured over the lifetime of a bus (normalizing it with the method of taxation used for private vehicles), several Indian states tax STU buses at considerably higher rates than private vehicles, despite the fact that STUs operate with several social obligations, not on entirely commercial principles.

These findings were further consolidated into a policy paper with a set of fiscal recommendations that would improve the financial viability of the aforementioned STUs. The primary observations included:

- Increasing duties on fuel for retail consumers to offset a reduction in fuel taxation for STUs;
- Rationalizing Motor Vehicle Taxes in states to remove the implicit favoring of private vehicles over STU buses;
- Taking up tax reductions for city-specific STUs on a priority basis;
- Harmonizing the method of Motor Vehicle Tax computation across states.

Following the conclusion of the initial phase of the research, the project moved to a deep-dive bus taxation analysis of three STUs, with a focus on advocacy – pushing proposals for tax reductions to the relevant State Governments on behalf of the concerned STU. The criteria for choosing these three STUs included:

1. Prioritizing states with relatively high rates of taxation on STUs, so as to assist the STU in making a case to the relevant state government for reduction of taxes;
2. Prioritizing STUs for whom tax reductions could lead to meaningful changes in their financial conditions;
3. Working with STUs that were willing to provide sufficient financial and operational data to perform a comprehensive analysis.

The three STUs that were chosen for the deep-dive analysis are:

1. Bengaluru Metropolitan Transport Corporation (BMTC)
2. Uttar Pradesh State Road Transport Corporation (UPSRTC)
3. Gujarat State Road Transport Corporation (GSRTC)

2. DEEP-DIVE BUS TAXATION ANALYSIS

1. BMTC

In 2015-16, BMTC carried 5.13 million daily passenger-trips (1.87 billion passenger-trips annually), covering a distance of 1.29 million kilometers each day with a fleet of 6,404 vehicles. During the same year, the Bengaluru Metro facilitated a total of 16.8 million passenger-trips, indicating that over 99% of passenger-trips performed by formal public transport within the city were by bus. While the expansion of the metro network over the following decade will lead to a rise in metro ridership, the importance of BMTC in connecting areas outside the metro network – as well as serving as a first/last-mile connectivity provider to the metro – is only likely to increase. However, the financial condition of BMTC in the past five years has been a cause for concern to scale operations or improve the services. Figure 1 below highlights trends in BMTC's net revenue from 2010-11 to 2015-16.

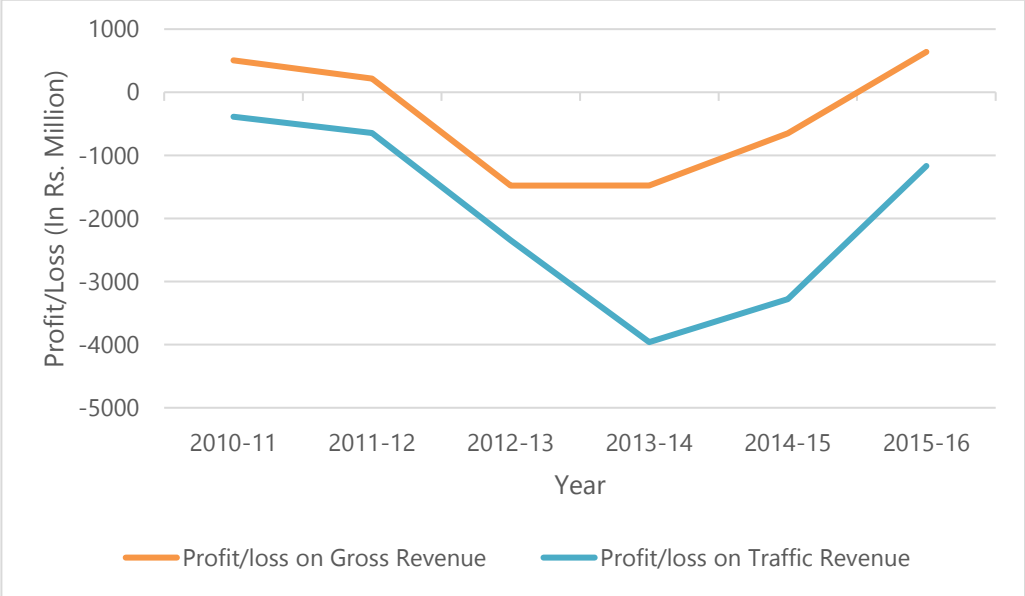

Figure 1: BMTC Net Revenue 2010-11 to 2015-16

To cover up the difference, the Corporation has been reducing inefficiencies in its operations but the operating margins continue to be low. The Corporation can transfer the burden of higher costs to passengers in the form of more frequent fare increases but it is unlikely to impact revenue generation in a major way. It will only make the public transport unaffordable for the common man. The lack of proper operating margins for the Corporation makes it vulnerable to future cost increases for service improvement as it receives no operating subsidy from the Government of Karnataka.

The extent of direct tax (in the form of Motor Vehicle Tax) liable from BMTC to the Government of Karnataka in recent years has been a notable contributor to the Corporation's current precarious financial position. The following sections discuss current Motor Vehicle Tax regime applicable to BMTC: that it pays the same rate as the three other Corporations in Karnataka despite operating in significantly more challenging conditions; and that the current Motor Vehicle Tax regime provides private operators an advantage over state operators, despite the numerous social obligations the latter are required to perform.

a) Motor vehicle taxes in Karnataka for State owned STUs

BMTC along with the three other STUs in Karnataka (Karnataka State Road Transport Corporation (KSRTC), North Eastern Karnataka Road Transport Corporation (NEKRTC), and North Western Karnataka State Road Transport Corporation (NWKRTC)) are the Government Stage Carriage operators as per the Motor Vehicle Tax structure in Karnataka. All four Corporations are levied Motor Vehicle Tax at the same rate: 5.55% (tax + cess) of traffic revenue earned by the Corporations during the financial year. Amongst these BMTC is the only city-specific operator and it faces a very different operating environment when compared to the other 3 STUs by virtue of operating primarily within the city of Bengaluru, where the peak-hour traffic has declined to less than 15km/hour as early as 2008. The effect of Bengaluru's traffic congestion has impacted BMTC in three major ways:

1. Fuel Efficiency

City bus operations rarely allow for high fuel efficiency as the bus needs to halt at bus stops which are closely spaced and buses spend more time idling in traffic, especially for air-conditioned services. The difference in fuel efficiency across BMTC and other Corporations in Karnataka is shown in Table 1.

Table 1: Fuel Efficiency: BMTC and Other Corporations in Karnataka

Year	BMTC	KSRTC	NEKRTC	NWKRTC
2013-14	3.82 km/litre	4.76 km/litre	5.14 km/litre	5.10 km/litre
2014-15	3.79 km/litre	4.82 km/litre	5.15 km/litre	5.17 km/litre

As BMTC manages a lower output per litre of diesel consumed, it faces a proportionately higher fuel bill per kilometre operated than the other three Corporations. It is also important to note in this context that (as of 2015), Karnataka's effective Sales Tax rate on diesel was approximately 22.48% of the base price of diesel, indicating that a considerable portion of BMTC's extra fuel costs accrue to the Government of Karnataka via indirect taxes.

2. Vehicle Productivity

Given that traffic speeds in Bengaluru are lower than those on Karnataka's highways and rural roads, the average vehicle productivity (kilometres travelled per vehicle per day) of BMTC is also lower than those of the other Corporations in Karnataka.

Table 2: Vehicle Productivity: BMTC and Other Corporations in Karnataka

Year	BMTC	KSRTC	NEKRTC	NWKRTC
2013-14	198.99 km/day	328.46 km/day	295.21 km/day	326.70 km/day
2014-15	194.02 km/day	325.33 km/day	288.46 km/day	331.56 km/day

Low traffic speeds prevent BMTC – like other city STUs – from high daily vehicle utilisation. As a result, either capital costs increase – as a higher number of vehicles are required to maintain acceptable bus frequencies – or service quality declines, as the number of buses available are insufficient to ensure a frequent bus service.

3. Passenger Loads

Another factor of city operation that also impacts BMTC negatively are the number of passengers carried per bus. As table 3 shows, despite operating for lower distances on a daily basis, city buses carry far more passengers per bus.

Table 3: Passengers per bus per day - City and State STUs

Year	City STUs	State STUs
2013-14	670.24 passengers/bus/day	310.06 passengers/bus/day
2014-15	614.65 passengers/bus/day	313.07 passengers/bus/day

The higher load factor leads to increased wear and tear on city buses. Higher loads on city buses – especially during peak hours – stress the tyres, brakes, shock absorbers and axles of the bus. This necessitates frequent maintenance and replacement of vehicle parts, leading to higher maintenance costs per bus than mofussil or intercity services. This aside, overcrowded buses are more prone to fare evasion, as conductors cannot reach all passengers in a highly crowded bus. In Karnataka, the difference in the number of passengers per bus across BMTC and other Corporations is extremely evident, as Table 4 below highlights.

Table 4: Passengers per Bus per Day: BMTC and Other Corporations in Karnataka

Year	BMTC	KSRTC	NEKRTC	NWKRTC
2013-14	798 p.b.d	321.1 p.b.d	314.4 p.b.d	487.5 p.b.d
2014-15	761 p.b.d	333.5 p.b.d	310.2 p.b.d	480.2 p.b.d

As such, operating public bus services solely within a city prove significantly less viable than operating mofussil or intercity services.

b) Motor vehicle tax in Karnataka for BMTC and private bus operators

State of Karnataka computes Motor Vehicle tax differently for government and private bus operators. While Motor Vehicle Tax for the four Corporations in Karnataka is levied as a percentage of their traffic revenue, it is levied based on the total capacity (seats offered across all buses) for private operators. Until the previous (2016) Karnataka budget, this resulted in BMTC paying a far higher effective rate of tax per bus than any other type private operator, as seen in Table 5.

Table 5: Effective Annual Tax per Bus: BMTC and Private Operators (Based on 2014-15 Data)

	BMTC	Private Stage Carriage	Private City Stage Carriage	Contract Carriage
Annual Tax/Bus	INR 189,773	INR 100,800	INR 50,400	INR 168,000

Private city operators are charged half the rate of private mofussil or intercity operators, a concession that has not been extended to BMTC. In the 2016 budget, Motor Vehicle Tax rates were increased for private operators by 50%. Even in this instance, private stage carriages pay a lower rate per bus than BMTC:

Table 6: Effective Annual Tax per Bus: BMTC and Private Operators (Based on 2014-15 Data)

	BMTC	Private Stage Carriage	Private City Stage Carriage	Contract Carriage
Annual Tax/Bus	INR 189,773	INR 151,200	INR 75,600	INR 252,000

The above calculation utilizes the effective rate of tax per BMTC bus for 2014-15; in actuality, BMTC's effective tax rate per bus for the current financial year will be higher. There is little justification to charge BMTC higher rates of tax than private operators, especially given major social obligations of the former:

1. Routing

BMTC's operations extend across Bengaluru city and outlying areas. This spans several extremely unremunerative routes. BMTC serves such routes as it is required to provide connectivity across the area. Unlike private operators, it cannot restrict services only to profitable routes or routes with high load factors. BMTC is neither compensated nor provided viability gap funding for these unprofitable routes, resulting in a reduction of its operating margin.

2. Concessions

BMTC provides a wide range of concessions to various sections of the travelling public: differently-abled passengers, senior citizens and students a large chunk of these concessions. While the Government of Karnataka reimburses BMTC for concessional student passes, the numerous other concessions rendered by the Corporation are not compensated for, resulting in a further reduction of potential revenue.

3. Staff Costs

On the cost front, government regulations also result in BMTC having to bear a higher staff cost burden than a comparable private operator.

Staff wages: Unlike private operators, BMTC is not at liberty to unilaterally decide wages of its staff, as these are determined by government-mandated commissions. As a result, BMTC – in having to pay fair wages to its staff – incurs a significantly higher wage burden per staff than a private operator.

Working hours: BMTC is mandated to operate on a shift system that prevents its staff from working excessively long hours. Private operators, again, are not subject to such restrictions, resulting in them maintaining a lower staff-to-bus ratio than BMTC.

The current Motor Vehicle Tax structure severely disadvantages BMTC making it increasingly unviable to provide quality public transport facilities for the city. As BMTC has already engaged in multiple cost-cutting measures and cannot feasibly increase fares, a reduction in the current Motor Vehicle Tax rate liable from BMTC is the simplest method to ensure passenger fares remain stagnant. The Motor Vehicle Tax revenue from BMTC's services comprised only 3 percent of the state's Transport Department revenue and any reductions in revenue from tax rebates could easily be offset by minor increases in taxation on private vehicles.

Presentation of the analysis: The analysis helped BMTC to draft a proposal to the Karnataka Government, seeking a reduction in motor vehicle tax. Shortly after the submission of this proposal, the Government of Karnataka exempted BMTC from paying Motor Vehicle Tax in entirety for Financial Year 2017-18, unprecedented in the state. The only other state that exempts its STUs from Motor Vehicle Tax is West Bengal.

BUMPY RIDE Transport utility says its finances are in bad shape due to wage revision, higher fuel cost and demonetisation

BMTC is on Road to Recovery as Govt Waives ₹120-cr Tax

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Bengaluru: The cash-strapped Bengaluru Metropolitan Transport Corporation (BMTC) has received a shot in the arm with the state government exempting it from paying the motor vehicle tax this year. The waiver of up to ₹120 crore could improve the transport corporation's sagging finances.

The transport utility shares 5.5% of its revenue with the state government towards motor vehicle tax, which puts the figure at around ₹120 crore a year.

With BMTC registering a revenue loss of ₹174 crore in the financial year of 2016-17, the corporation renewed its plea for the waiver. Its demand was backed also by an increment of about 12.5% in worker wages, an increase in fuel cost and demonetisation.

Dr Ekroop Caur, outgoing managing director of BMTC, said the corporation had shelled out an additional Rs 205 crore due to wage revision and costlier diesel in the previous financial year.

"Despite the poor financial state, we have not increased ticket prices in the past three and half years. In fact, the fare was brought down," she pointed out.

Caur revealed that the corporation has been pressing the government for MV tax exemption for the past three years. "The exemption will be a big relief to BMTC as it is in a precarious financial condition," Caur said.

The BMTC owes more than ₹656 crore to various financial institutions. The money was borrowed to procure buses as well as to construct Traffic Transit Management Centres (TTMCs).

Pawan Mulukutla of the World Resources Institute pointed out that the BMTC was paying the highest tax when compared to other transport corporations across the country. "State transport corporations in Delhi, Mumbai and Chennai pay less than 10-30% of what BMTC pays every year. The exemption should be extended to three other transport corporations (KSRTC, NWKRTC and NEKRTC) every year," he felt. Mulukutla said the grants should be used to purchase 500 more buses.

For Vinay Sreenivasa, member of Bengaluru Bus Commuters Forum, the exemption would really be of use for public if the ticket fares are slashed. "The BMTC should bring down fares across all stages. Travelling by the bus should be cheaper than in any other mode of transport. The prices of student and monthly passes should also be brought down," he said.

The corporation should make use of this opportunity to repay dues of its employees, he said.

OTHERS PAY LESS TAX

State transport corporations in Delhi, Mumbai and Chennai pay less than 10-30% of what BMTC pays every year. The exemption should be extended to three other transport corporations (KSRTC, NWKRTC and NEKRTC) every year

PAWAN MULUKUTLA, World Resources Institute

Figure 2: Media Coverage of the BMTC's tax exemption

2. UPSRTC

Uttar Pradesh is the most populated state in India and with almost 30% of the state's population classified as living below the poverty line there exists a great need for affordable, reliable and comfortable public transport within the state. UPSRTC is the STU entrusted with providing the bulk of bus-based public transport in the state. As of 2015, the STU's fleet strength was 9,415; the fourth-largest STU in the country in terms of fleet size after the Maharashtra State Road Transport Corporation (17,957), the Andhra Pradesh State Road Transport Corporation (12,079) and the Telangana State Road Transport Corporation (10,329). Considering the state's population, this translates to an average of 44 buses per 10 lakh population, well below the minimum prescribed norm of 400 buses per 10 lakh population. This suggests there is plenty of scope to provide better bus-based public transport facilities in the state by increasing the STU's fleet strength. This, however, requires funds.

a) Financial position of UPSRTC

UPSRTC has oscillated between marginal surpluses and losses over the past decade, which puts it in a relatively advantageous position vis-à-vis most STUs in India, which have tended to report heavy losses. The STU's financial position is detailed in table 7. However, the STU's finances have not been comfortable enough to allow it to autonomously increase its fleet to cater to the state's commuting requirements, registering an effective increase of just 220 buses annually between 2007 and 2015.

Table 7: UPSRTC - Revenue Growth 2007-2015

Year	Gross Revenue (in INR crores)	Net Revenue (in INR crores)
2007	1,141.17	-8.9
2008	1,236.74	40.03
2009	1,404.73	43.73
2010	1,657.02	27.04
2011	2,028.06	-51.97
2012	2,281.91	-48.46
2013	2,529.36	-82.60
2014	2,967.93	-131.54
2015	3,275.55	2.48

Given that state and central grants for the purchase of new rolling stock or system upgrades are often slow in arriving and unreliable (varying with state/central finances and political priorities across years), WRI India's analysis was endeavored to ascertain:

(a) whether effective direct tax rates for UPSRTC had changed from 2007 to 2015;
(b) whether the effective direct tax rate for UPSRTC was higher or lower than the national average;
(c) UPSRTC's estimated outlay on fuel taxation;
(d) The impact of taxation on UPSRTC's overall financial position.

b) Change in Effective Direct Tax Rates: UPSRTC

For direct taxes, the 'effective' tax rate is measured in taxes as a percentage of total revenue, as – irrespective of the method of computation – direct taxes broadly correspond to changes in revenue of the STU. In this regard, Uttar Pradesh registered the biggest shift of any state in India, with the effective tax rate for UPSRTC increasing twelvefold from 2007, as highlighted in figure 3.

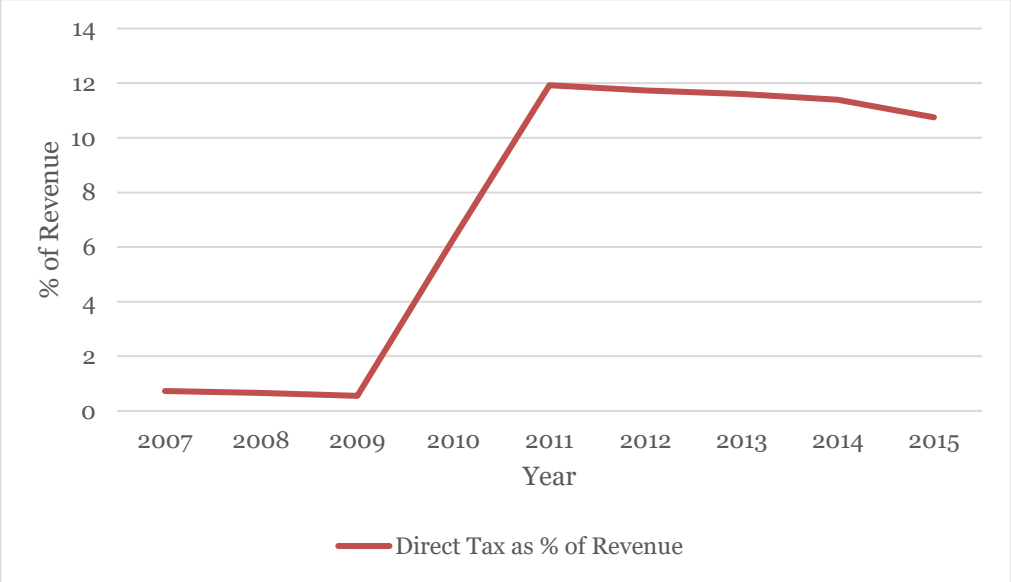

Figure 3: Change in effective direct tax rates - UPSRTC

This anomaly is especially evident when juxtaposed with the national average, displayed in figure 4.

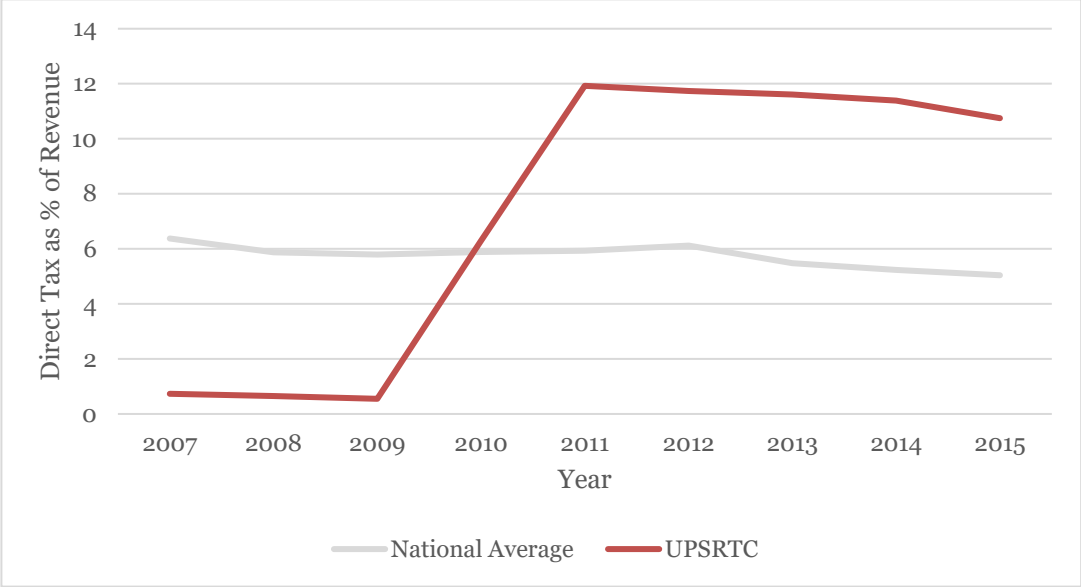

Figure 4: Effective Direct Tax Rate - UPSRTC and National Average

It is pertinent to note that the jump in effective direct tax rates corresponds very closely with changes in UPSRTC's net revenue from positive to negative over the 2011-2014 period.

c) Impact of Taxation on UPSRTC's Financial Stability

Table 8 juxtaposes UPSRTC's net revenue along with its total direct tax liabilities from 2007 to 2015.

Table 8: UPSRTC - Revenue and Taxation Data

Year	Net Revenue(in INR crores)	Total Direct Tax (in INR crores)
2007	-8.9	8.35
2008	40.03	8.08
2009	43.73	7.73
2010	27.04	104.26
2011	-51.97	241.85
2012	-48.46	267.76
2013	-82.60	293.66
2014	-131.54	338.01
2015	2.48	352.09

As is evident from table 8, the STU's losses since 2011 could have been entirely obviated in the absence of direct taxes alone; the removal of which would have provided a surplus of INR 1,181.28 crores. This surplus is equivalent to the purchase of 3,375 new buses for the state, which would have increased UPSRTC's fleet strength by 33%.

d) UPSRTC's Estimated Fuel Taxation Outlay

A major gap in extant literature on public bus taxation in India is the lack of information on the repercussions of fuel taxation on STU finances. This is primarily due to the lack of data necessary to perform these calculations.

Using a set of available variables (STU fleet strength, average daily utilization, monthly rates of Excise Duty and State VAT), the annual indirect tax expenditure by UPSRTC on fuel consumed for the years 2013 to 2015 was estimated. Table 9 provides these estimates.

Table 9: UPSRTC - Fuel and Direct Taxes 2013-15

Year	Total Direct Tax (in INR crores)	Estimated Fuel Tax (in INR crores)
2013	293.66	260.77
2014	338.01	262.54
2015	352.09	340.50

This trend is largely in line with the trend of state-wide STUs being liable for marginally higher direct tax payments than for indirect tax payments on fuel. However, it also highlights the fact that there is significant scope for tax relief beyond pure Motor Vehicle Tax reductions.

Presentation of Analysis: This analysis was presented at WRI India's Bus Karo workshop held on December 16, 2017 to a large audience of civil servants and government officials from Uttar Pradesh. The presentation aroused much interest amongst officials from UPSRTC who were unaware of the significant change in taxation policy within the state. The presentation also attracted interest from Mr. Keshav Verma, Advisor to Government of Uttar Pradesh, who promptly suggested the analysis be forwarded to the state government for consideration. On request, data from the analysis was collated and sent to Mr. Verma as well as UPSRTC officials. It is currently under consideration by the Government of Uttar Pradesh, and a favorable outcome is hoped for.

3. GSRTC

On similar lines of the UPSRTC analysis, a deep-dive analysis of the GSRTC was conducted, which operates intercity and some city bus services in the state of Gujarat. With a fleet strength of 7,765 buses, it is the sixth-largest STU in India, and while displaying considerable revenue growth since 2007, it has primarily remained loss-making as indicated in Table 10.

Table 10: GSRTC- Revenue Growth 2007-2015

Year	Gross Revenue(in INR crores)	Net Revenue (in INR crores)
2007	1,593.09	-46.99
2008	1,696.74	20.50
2009	1,778.78	-39.62
2010	1,752.23	-243.94
2011	1,968.04	-160.50
2012	2,197.05	-402.31
2013	2,485.48	-235.84
2014	2,778.19	-193.45
2015	2,862.18	-133.50

Similar to the UPSRTC case study the primary focus was to examine whether the STU's financial instability could be attributed to increased rates of taxation. The results indicate that – unlike with UPSRTC – the effective rate of taxation in Gujarat has actually dropped since

2007; however, the effective direct tax rate in Gujarat is significantly higher than the national average. This is illustrated in figure 5 and 6.

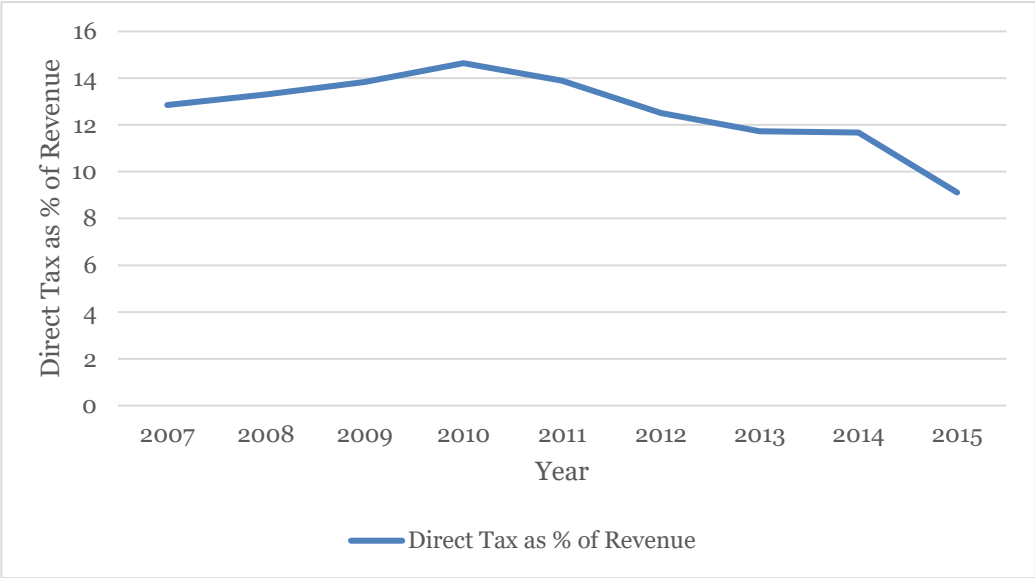

Figure 5: Change in effective direct tax rates - GSRTC

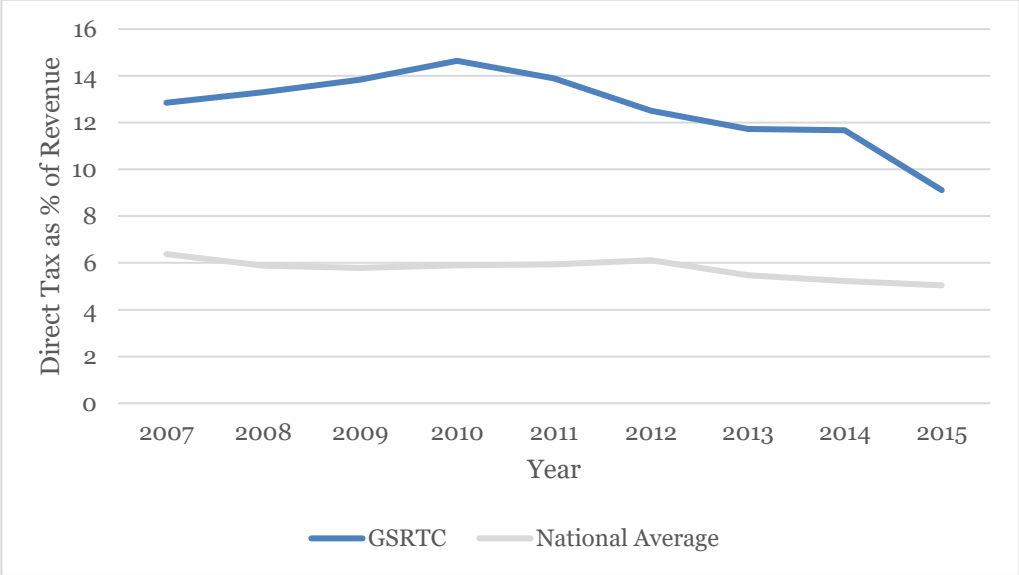

Figure 6: Effective Direct Tax Rate - GSRTC and national Average

a) Taxation: Impact on GSRTC's Financial Stability

Given Gujarat's relatively high direct tax rate for STUs, it is not altogether surprising that taxation plays a major role in exacerbating GSRTC's loss-making over the years. Table 11 compares the STU's net revenue with its direct tax liabilities between 2007 and 2015 – barring the years 2008 (where GSRTC was profitable even after taxes) and 2012, the operator's direct tax liabilities far exceeded its total losses for the year.

Table 11: GSRTC- Revenue and Taxation Data

Year	Net Revenue (in INR crores)	Total Direct Tax (in INR crores)
2007	-46.99	204.65
2008	20.50	225.65
2009	-39.62	246.07
2010	-243.94	256.56
2011	-160.50	273.46
2012	-402.31	274.87
2013	-235.84	291.47
2014	-193.45	324.22
2015	-133.50	260.79

Assuming no direct taxes had been levied during this period (ceteris paribus), the surplus that would have accrued to GSRTC would be INR 922 crore, which in bus purchase terms represents 2,357 foregone vehicles that could have been used to augment the operator's fleet and network.

b) GSRTC's Estimated Fuel Taxation Outlay

Trends in GSRTC's estimated outlay on fuel taxes differ from those of UPSRTC's – differences in state tax rates on fuel in Gujarat suggest that the operator now spends more on fuel taxes than on direct taxes, despite its lower fleet strength than UPSRTC's. There is thus a strong case to be made for indirect tax reductions in the state as a method of supporting the STU in improving its financial position.

Table 12: GSRTC - Fuel and Direct Taxes 2013-15

Year	Total Direct Tax (in INR crores)	Estimated Fuel Tax (in INR crores)
2013	291.47	216.84
2014	324.22	271.47
2015	260.79	303.53