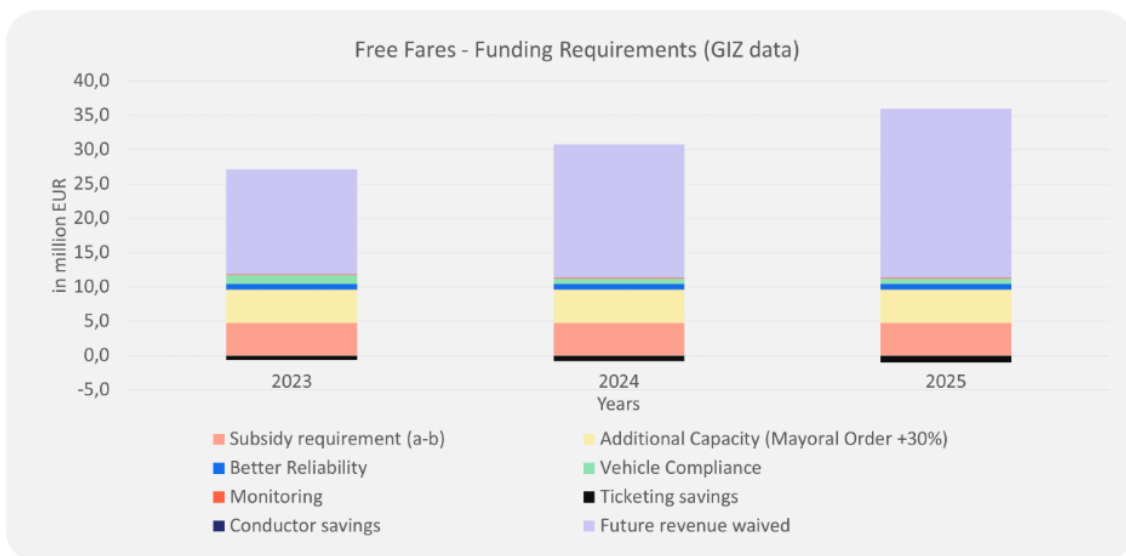
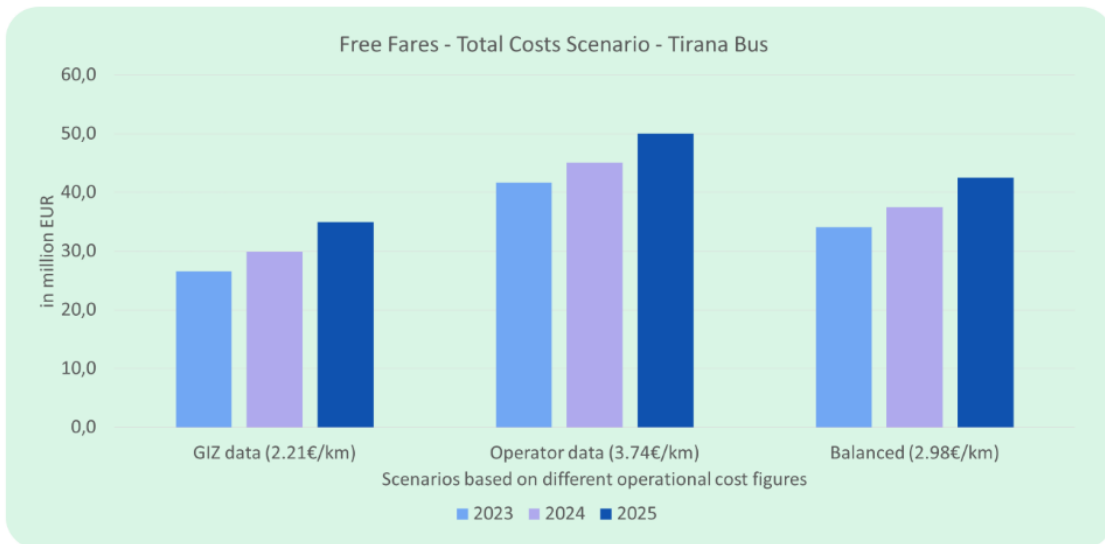


Free Public Transport: Scope and Appraisal

I. Executive summary and recommendations

1. Before a free fares scheme is implemented, service quality improvements have to be made to provide adequate capacity, acceptable reliability and decent quality. Omitting these elements will damage the longer-term standing of public transport.
2. In cities where a free fare policy was implemented, the service was already heavily subsidized (90% subsidy in Luxemburg and Dunkirk).
3. The impact of modal share change, from private vehicles is not high (e.g. 3% in Tallinn).
4. The **total cost of a quality improvements + fare free scheme over 3 years is estimated to be between EUR 91.5m and 114.1m** (see graph below). This does not include investments in BRT or new buses.



5. A fare free scheme should not be funded by diverting cash from other transport projects such as bus priority, fleet renewal, network expansion and customer service enhancements. To ensure this, budgets in these areas should be confirmed at the same time as the announcement of a free fares scheme.
6. All other known schemes have abolished fares which were already covering only a fraction of operating costs. Most have benefitted from either plentiful existing spare capacity or new capacity being provided.
7. A time-limit linked to availability of funds should be stated from the beginning. This controls public expectations and gives room for manoeuvre in future budgetary choices.

Recommendations

- A free fares scheme is unlikely to be the optimal use of funds available for developing sustainable transport in Tirana.
- A mixed approach which enhances the quality and coverage of the bus network while also incorporating **targeted fares concessions for older people, children and young adults would be more effective.**
- If, however it is decided to proceed with free fares then sufficient time should be allowed for the scheme to launch with capacity and quality measures built in from the start.

II. Objectives of a free fares scheme

It is crucial that before implementing any policy, such as making public transport fare free, to consider: **Why do we want to implement this policy and what is our aim?**

Objectives will include:

1. Increasing social inclusion
2. Reducing car-use, alleviating congestion and emissions
3. Making public transport easier to use
4. Supporting urban regeneration and development by increasing accessibility
5. Safety
6. Health
7. Financial sustainability

In order to make the adequate choices, we should also define the elements of the scheme, choices available for each of them as illustrated in the table below.

Scheme definition

Table 1 shows the key features which define the scope of a free fares scheme.

Feature	Choices available	Observations
Routes	Free on the whole network, at all times, or free on some routes only	<ul style="list-style-type: none"> • Running only some of the network free (on other than a pilot basis) will need a rationale for the choice of which areas are to benefit and which do not. • Free routes will poach riders from those other routes nearby which still charge fares. • Given the Tirana network's relatively small size and overlapping route catchments, the rationale for the choice of routes to run free will be sensitive / open to challenge.
Eligibility	All those who wish to travel, or restricted e.g. to Tirana residents, to people in certain age groups, etc.	<ul style="list-style-type: none"> • The scheme in Tallinn is residents-only, whereas that in Luxembourg is available to all, including the many foreign workers there. • In Tirana the creation and administration of an "eligibility card" would be possible. However, it is also possible that the large majority of existing users are residents anyway, so the cost of creating and administering such a card may not be justified.
Ticketing	No tickets, or a pass required for access in order to retain some control on access / restrict to residents etc.	<ul style="list-style-type: none"> • Requiring a pass even where there is free travel is more common in cities where the free travel is only available to some users, e.g. children. In such cases the infrastructure to check the free pass (card readers) exists in any case as others must pay. • Where there are no card readers, a pass system is probably not justified as visual checks by staff would inevitably be perfunctory at best.
Service levels	As now, or frequencies increased/ routes added in anticipation of the extra demand	<ul style="list-style-type: none"> • Research from cities which have put free fare schemes in place suggests that the need to enhance capacity must be included in the overall scheme. The negative publicity of failing to allow for this clearly foreseeable impact could be damaging. • In Tirana, relieving existing crowding is amongst the top passenger priorities. Having plans to increase services by

		30% or so in advance of / simultaneous with free fares is advisable.
Service quality	Existing bus stops and passenger information – or with improvements	<ul style="list-style-type: none"> • Similarly, the free product should not also be the “low-quality” product. The need to modernise vehicles and stops should form part of the scheme.
Conductors	Retained or removed.	<ul style="list-style-type: none"> • Conductors could be retrained as “customer service agents”, though this would reduce savings.

Table 1: scheme definition

III. Lessons from other cities

Although free public transport is often discussed in theoretical terms, it is not widely implemented. Where it has been, its implementation has had a wider impact on the organization of public transport, with a need to include not only free fares but also enhanced quality and capacity.

Given what we know about current customer satisfaction and passenger priorities in Tirana, improved quality and capacity of public transport should be in place before implementing any free fares initiatives.

- **In all the cities where free public transport was introduced, the fares were previously only covering a small portion of the operating costs** (for instance, only 9.2% of the operational costs were covered by fare revenue in the French city of Dunkirk¹ and countries like Luxembourg or Estonia also had low cost-coverage rates (with up to 90% subsidy levels).
- Implementing this policy and still providing high quality public transport requires continuous investment (added costs). Allocating a much higher share of available government subsidies to compensate for the loss of fare revenue may well crowd out funding for the development of the quality and scale of the network².

Being the first city in the world to move in a short period from no subsidy to 100% subsidy, carries a **major risk that the scheme would fail**. Analysis of how well a free fares scheme would address objectives, and a tally of the associated risks included is shown in the table below.

The **table below summarizes** certain free fare policy objectives incl. benefits and risks and **observations from other countries**:

¹ [Forum Vies Mobiles | Préparer la transition mobilitéaire](#)

² . Some cities in Latin America discontinued their FFPT schemes as the quality of the service declined (UITP Policy brief).

Scheme objectives

Table 2 show the objectives of a free fares scheme, the benefits which free fares could deliver against each objective, and the risks.

#	Objective	Benefits	Risks	Observations
A	Increase social inclusion	<ul style="list-style-type: none"> • Citizens for whom fare was a deterrent to travel and people in non-car households (or without access to the household car) would have greater access to those destinations served by public transport. • This increases their opportunity to access employment, education and services. • Families with children may see the highest benefits, with the removal of the need for parents to pay for their children's travel. 	<ul style="list-style-type: none"> • All (or most) available subsidy is allocated to free fares and none (or little) is available to increase frequencies or to run services to more destinations • This results in reduced access for public transport users relative to car users as the city grows. • Capacity is used up too quickly resulting in worse service for excluded groups rather than better. 	<ul style="list-style-type: none"> • Fares are relatively inexpensive at present, following five years with no increase. • There is evidence that crowding and safety are passengers' highest priorities. There will also be a need to expand the network into under-served areas. • Taking all these factors into consideration, allocating most or all of the available subsidy to fares-free would hamper progress on addressing passengers' highest priorities. • Many cities have chosen the path of targeted fares concessions – in London around a third of users travel free due to concessions for U18s and those aged 60+.
B	Reduce car use	<ul style="list-style-type: none"> • Car use falls as car users transfer some or all of their trips to bus, reducing congestion and emissions. • Buses become easier to operate reliably due to the reduction in congestion. 	<ul style="list-style-type: none"> • Car users are not attracted in any numbers because fare was never the critical factor for them. • Some existing bus users switch to car as they value comfort and lack of crowding more than reduced fare 	<ul style="list-style-type: none"> • Evidence from cities with free fares systems shows that transfer from car is relatively low even where there is high-quality service (e.g. 3% in Tallinn).

			and are deterred by the increased average loads.	<ul style="list-style-type: none"> • Lyon decided not to proceed with free fares when research indicated that most of the expected patronage increase would come from walking and cycling.
C	Make public transport easier to use	<ul style="list-style-type: none"> • There is no need to understand the fares and ticketing system, removing one of the barriers to using public transport. 	<ul style="list-style-type: none"> • Abolition of all ticketing also removes live data on the use being made of the system. • The Municipality loses information to guide system planning. 	<ul style="list-style-type: none"> • Cities which retain fares are simplifying ticketing by enabling use of personal bank cards. (Transport-specific cards are retained for people without access to banking). • Similarly, fares complexity may be tackled by offering guaranteed daily and weekly fares caps.
D	Support urban regeneration and development by increasing accessibility	<ul style="list-style-type: none"> • Greater access to the city's services (shops, entertainment, etc) encourages business growth. • Reductions in car use enable some roadspace to be reallocated to sustainable modes (walking, cycling and public transport). 	<ul style="list-style-type: none"> • Support for regeneration should include subsidising enhanced public transport network in target areas (e.g. new housing sites, under-served retail parks, etc) in advance of commercial viability. • To the extent that funding is limited, free fares reduces a city's capacity expand the network in this way. 	<ul style="list-style-type: none"> • Some cities have targeted their expenditures by provided free services in specific regeneration priority areas (e.g. the city centre) while retaining fares on the network as a whole.
E	Safety	<ul style="list-style-type: none"> • Removing cash-handling reduces risk of assaults on staff. 	<ul style="list-style-type: none"> • Removal of fares increases incidence of onboard street crime onboard (theft, sexual assault, etc). 	<ul style="list-style-type: none"> • Some cities with free fares have put in place a pass system at nil or nominal charge. • In principle this increases people's perception that the bus is a place with rules. • It also makes the sanction of withdrawing the pass available. • These measures indicate that feelings of safety can be reduced

				when buses are made “open access” through abolition of fares. We know that safety improvements are a passenger priority.
F	Health	<ul style="list-style-type: none"> • Positive impact on physical health through greater mobility for some citizens, e.g. walking to and from bus stops by those who did not travel much before. • Positive impact on mental health through greater access to social opportunities for excluded groups. 	<ul style="list-style-type: none"> • Negative impact on physical health due to reduced walking or cycling by some citizens. 	<ul style="list-style-type: none"> • Free fares schemes tend to produce relatively low net gains in the use of sustainable modes compared with policies which spread spending across the fares/services/quality mix.
G	Financial sustainability	<ul style="list-style-type: none"> • The budget requirement is more easily estimated as there is no revenue element. 	<ul style="list-style-type: none"> • Increased exposure to national funding sources reduces local control over the network. • Where national funding is used, then future allocations are exposed to choices on expenditure priorities across the whole national budget. 	<ul style="list-style-type: none"> • Most cities with free fares schemes previously had very high levels of subsidy – e.g. 67% of costs in Tallinn, 90% in Dunkirk and Luxembourg. • There was therefore a known and continuing source of funds close to the scale required for free fares. • In general, the cities with consistent records of high-quality public transport tend also to have higher degrees of local control over funding (whether fares or subsidy).

Table 2: scheme objectives, benefits and risks

IV. Free Fares in Tirana: Costs

Scope

We know that the current network offers unacceptable quality (see Appendix A for recent performance indicators). Steps are already being taken to deal with this and acceleration / enhancement of these needs to be included in the free fares project.

The market for supply of bus services in Tirana is currently fragile, with the financial shocks brought about by the pandemic and the international situation threatening to overwhelm the operating model used by the bus companies.

The ongoing budget should include not only the **fares revenue waived** but also the cost of providing the minimum quality needed for sustainable increases in public transport's mode share:

- **Sufficient capacity**, where needed to cater for forecast demand increases.
- **Acceptable reliability**, in particular measures to ensure that enough drivers are recruited to reduce short-notice service cuts.
- **Minimum vehicle standards**, including basic compliance with existing requirements on aircon.
- **Adequate, consistent and effective monitoring** of loadings, bus-km and reliability. Requires manual roadside surveys and GPS-based analysis of bus-km and headways cf schedule.

The quality of bus service has to be improved first (e.g. higher bus frequencies, more buses) before encouraging more passengers using a low-quality bus service with overcrowded buses and unreliable waiting times.

There will also be start-up costs, including:

- Impacts of **changes in the role of conductors**, for example retraining costs. For now, the analysis assumes that conductors would be retitled "Passenger Assistants" and retained on each vehicle.
- **Marketing** and public information.

Estimated ongoing costs, 2023-2025

The estimated ongoing budget requirement over the period 2023-2025 is EUR 91.5m (GIZ data).

EUR	2023	2024	2025	Total 2023-2025	Note
a) Current Revenues (2022)	12.7	12.7	12.7	38.1	
b) Current Costs - Mayoral order (2022)	17.5	17.5	17.5	52.5	
Subsidy requirement (a-b)	4.8	4.8	4.8	14.4	1
Additional Capacity (Mayoral Order +30%)	4.8	4.8	4.8	14.4	2
Better Reliability	0.8	0.8	0.8	2.5	3
Vehicle Compliance	1.3	0.8	0.8	2.9	4
Monitoring	0.1	0.1	0.1	0.3	5
Ticketing savings	-0.6	-0.8	-1	-2.4	6
Conductor savings	0	0	0	0	7
Future revenue waived	15.3	16.1	16.9	48.3	8
GRAND TOTAL	26.6	30.0	35.0	80.9	

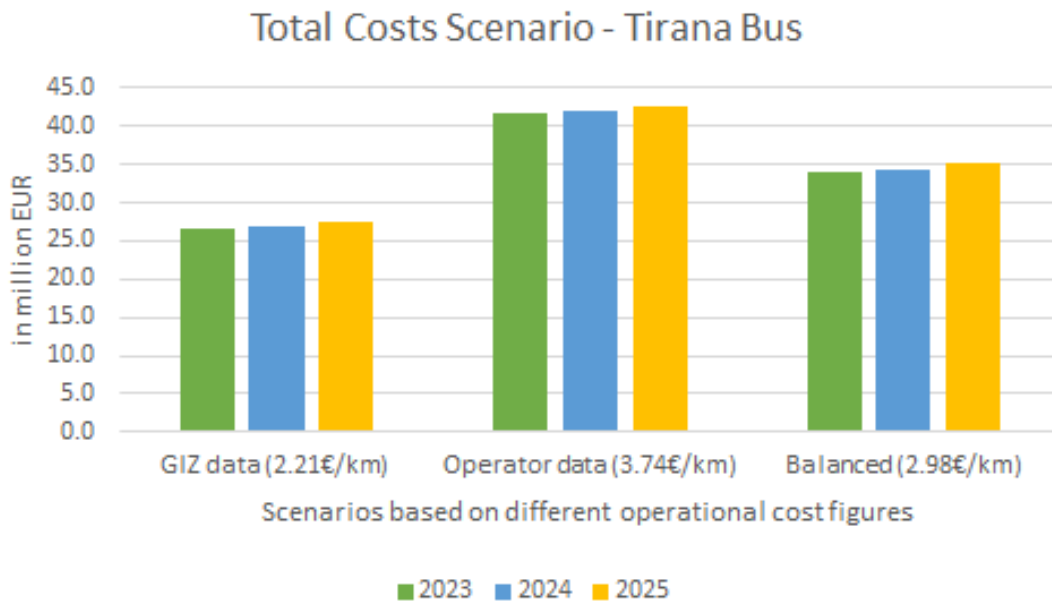
Table 3: estimated ongoing costs

This calculation does not include or cover BRT implementation but current bus network.

Notes

- Subsidy requirement based on 2022 estimated operator revenue set against cost of operation of network kms specified in Mayoral Order. Cost of operations = 2.21€/km. (GIZ estimate)
- Additional 30% bus-km over current level of 550,000-660,000 km per month.
- Assumed increase of 20% in driver wages from current level of EUR 3m p.a (12% of operating costs).
- EUR0.5m short term maintenance initiative + additional 7% in vehicle operating costs (100% increase in maintenance cost).
- Estimated costs of roadside surveys of each route at two locations for eight hours once each month plus cost of two transport department staff to analyse and report.
- Assumes a current cost of ticketing equipment of EUR per bus (capital) and EUR per ticket issued (recurring admin).
- Assumed nil, with conductors retained as "Passenger Assistants". For info, the estimated cost of conductors is EUR3m per annum (incl conductor salary increase).
- Current revenue (2022) of EUR 12.7m with growth of 5% pa to take account of expected growth in demand due to current policies to improve quality.

There is disagreement on what the network wide operational costs (cost/km) are. The following table summarizes three scenarios based on three different cost/km estimates.



V. Free Fares: Risks

An assessment of the status of the principal operating risks as at 27th July 2022 is shown in Table 4. Note this table covers practical issues – it does not directly list risks to the attainment of project objectives, e.g. mode shift but attainment is directly dependent on adequate management of the risks listed.

Risk	Impact	Likelihood	Overall Status	Notes
Operators unable to provide enough drivers for January 2022 start date, even with higher salary.	H	H	H	Includes both inability to properly staff current bus-km, and same for the enhanced bus-km.
Operators unable to provide enough vehicles for January 2022 start date.	H	L	L	Assumes that all operators currently have stored vehicles, per contracts.
Inadequate capacity on certain routes, even with additional 15% km on the network overall.	H	M	M	Demand changes may in practice not be uniform across the network.
Increase in offences onboard vehicles (theft, touching, etc).	H	L	L	Assumes that conductors are retained as “Passenger Assistants” or similar.
Inability to properly track demand impacts due to lack of ticketing data.	H	M	M	High impact as the passenger experience is critical to the scheme

Table 4: risk status