Terminal Evaluation Review form, GEF Independent Evaluation Office, APR 2015

1. Project Data

GEF project ID		3759	
GEF Agency project ID		3781	
GEF Replenishment Phase		GEF-4	
Lead GEF Agency (include all for joint projects)		UNDP	
Project name		Support to Sustainable Transport in the City of Belgrade (STB)	
Country/Countries		Serbia	
Region		ECA	
Focal area		Climate Change	
Operational Program or Strategic Priorities/Objectives		CCM-5- Promoting sustainable innovative systems for urban transport OP11-Sustainable Transport	
Executing agencies involved		Ministry of Agriculture and Environmental Protection, Government of Serbia	
NGOs/CBOs involvement		As stakeholders (TE states as main stakeholders "NGOs with roles on the various Project activities")	
Private sector involvement		None Given	
CEO Endorsement (FSP) /Approval date (MSP)		March 3, 2010	
Effectiveness date / project start		February 2011	
Expected date of project completion (at start)		May 2014	
Actual date of project completion		November 20, 2014	
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	.05	.05
	Co-financing		
GEF Project Grant		.95	.95
Co-financing	IA own		.02
	Government	6.5	3.3
	Other multi- /bi-laterals		
	Private sector		
	NGOs/CSOs		
Total GEF funding		1	1
Total Co-financing		6.5	3.32
Total project funding (GEF grant(s) + co-financing)		7.5	4.32
TE completion date		August 2015	
Author of TE		Roland Wong	
TER completion date		May 18 2016	

TER prepared by	Molly Watts & Mia Lu
TER peer review by (if GEF IEO review)	Molly Watts

2. Summary of Project Ratings

Project Outcomes	Moderately Unsatisfactory	Moderately Satisfactory	NR	Moderately Unsatisfactory
Sustainability of Outcomes		Moderately Unlikely	NR	Moderately Likely
M&E Design		Unsatisfactory	NR	Unsatisfactory
M&E Implementation		Moderately Unsatisfactory	NR	Moderately Unsatisfactory
Quality of Implementation		Moderately Unsatisfactory	NR	Moderately Unsatisfactory
Quality of Execution		Satisfactory	NR	Satisfactory
Quality of the Terminal Evaluation Report		-	NR	Satisfactory

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The project is contributing to meet the targets of GEF Strategic Priority on Climate Change #6, "Modal Shifts in Urban Transport and Clean Vehicle/Fuel Technologies", under the Operational Program #11, "Promoting Environmentally Sustainable Transport". The established mechanisms of the (environmentally sustainable) transport management will be initially applied in the biggest city of Serbia and then may be replicated in all areas of Serbia for raising the effectiveness of all governmental and donor initiatives in the transport sector of Serbia (PD, pg14).

3.2 Development Objectives of the project:

The project is intended to significantly improve the transport management infrastructure and to support the environment friendly development of Belgrade. The project will involve the civil sector and allow for a joint approach to the solution of the problems related to the sustainable management of transport. The project will allow Serbia to mainstream environmental issues into its transport management infrastructure and allow the country to meet its commitments to UNFCCC, since the project is expected to lead to the increased use of sustainable transport modes, as well as non-motorized modes such as walking and bicycling. The proposed project aims to reduce greenhouse gas emissions associated with the passenger transport system in Belgrade by about 17% in 2020 relative to 2007 levels, compared to a 47% increase in these emissions without any interventions (PD, pg17).

Different dimensions of outcomes are expected as below:

Outcome 1: Integrated land use and urban transport planning at the metropolitan level
1.1 Working group on transport and land-use planning, with external consultations on transit corridor Planning
1.2 Management of road space to maximize social gain through traffic management schemes that give priority to public transport vehicles and provide improved financial stability

Outcome 2: Rationalizing parking regulations
2.1 Modernizing parking system based on parking demand and supply conditions and marginal cost pricing
2.2 Park & Ride systems, with bicycling facilities

Outcome 3: Intelligent transport systems
3.1 A public transport management and information center to direct schedules and dispatch
3.2 Pilot program to monitor and enforce high-occupancy vehicle (HOV) lane compliance using smart
Video
3.3 *Pilot program to encourage car-sharing and taxi sharing along high volume corridors using mobile telephony and social networking software*

Outcome 4: Institutional transformation of government, businesses and general public to embrace sustainable transport
4.1 Training on enterprise development for public transport operators.
4.2 Training to improve and synchronize taxi and other paratransit operations
4.3 Capacity building for regulatory development
4.4 Case-study guide to aid replication of project elements

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

With the City already implementing its own activities from the April 2010 ProDoc such as the parking regulations (old Outcome 2) and intelligent transport systems (old Outcome 3), the City proposed that the Project funds be primarily used to strengthen sustainable transport planning, promote of low carbon transport options and build capacity. The "revised" activities included cycling, safe passage to school for children and eco-driving for public transit workers, and the formulation of a "sustainable urban transport plan" (SUTP) as originally planned.

Based on the brief description above, the new/adjusted expected four dimensions of outcomes are as follow:
Outcome 1: Integrated land use and urban transport planning at the metropolitan level (no change)
Outcome 2: Promotion of the cycling transport mode (cycling and eco-driving).
Outcome 3: Safe and Sound to School (safe passage).
Outcome 4: Institutional transformation of government, businesses and general public to embrace sustainable transport – Capacity building

4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 **Relevance**	Rating: Satisfactory

Relevance was scored in each outcome section in the TE. Outcomes of each planned activity were rated relevance in the TE, with scores ranging from 3 to 5. Taking all sub-section scores together, the overall rating is Satisfactory by the TE, and TER agrees with the rating. The project was relevant to Belgrade and Serbia's country goal of reducing carbon emission, promoting shared and green transportations.

4.2 **Effectiveness**	Rating: Moderately Unsatisfactory

The TE rated the overall results of the project as Moderately Unsatisfactory, and TER agrees with the rating because the project failed to achieve any significant GHG emission reductions and, because the project failed to recognize that the original GHG targets that were not achievable. Although the Project has generated 744 tonnes CO2eq in 2014 as direct GHG reductions, these were far below the target of 285,000 tonnes CO2eq/year at EOP (TE, pg23). However, for more specific targeted outcomes to promote the awareness of the planning of the green transportation, some results were satisfactory. Each planned outcome was evaluated separately as below:

Outcome 1: Integrated land use and urban transport planning at the metropolitan level.
A moderately satisfactory outcome was achieved with the completion of a "planning phase" for the preparation of a Sustainable Urban Transport Plan (SUTP) for Belgrade. A moderately satisfactory outcome has been achieved with formation of a working group on cycling and other

sustainable transport options. A satisfactory outcome has been achieved through the completion of a two-day international conference entitled “Sustainable Urban & Transport Planning” in Belgrade in May 2013 attended by more than 200 local and international delegates and experts (TE, pg23).

However, the European practice for GHG reductions from SUTP preparations studies estimate higher emission reduction rates of approximately 6% from the implementation of SUTPs40. Since the SUTP/SUMP preparations for the city of Belgrade are now in early implementation phases until 2016 or 2017, a conservative value of 1% GHG reduction by 2020 was deemed to be more realistic and was used in the estimation of the mitigation potential of this component;

Outcome 2: Promotion of the cycling transport mode.
A satisfactory outcome has been achieved with the distribution of pocket-sized cycling maps at promotional cycling rides; A satisfactory outcome has been achieved with a cycling website that provides an excellent overview of cycling in Belgrade and its societal benefits; A satisfactory outcome has been achieved with a “Let’s cycle in Belgrade” campaign to raise awareness of cycling not only as a recreational activity but also as a means of transport throughout the City. A satisfactory outcome has been achieved with the participation of Belgrade in all European Mobility Week events from 2011 to 2014 to promote cycling as an alternative mode of transport.

Outcome 3: Safe and Sound to School
A satisfactory outcome has been achieved with the completion of a survey of a number of Belgrade elementary schools on the preferred modes of travel of both parents and children from home to school. A satisfactory outcome has been achieved through Project support for providing special markings along pavement sections and street crossings along a “pedi-bus route” for pupils going to Sveti-Sava primary school.

However, survey data from the Project activity was used to estimate GHG emission reductions from the motorized modes to walking to school. The survey revealed that 20% of the pupils are driven to the school in a vehicle that is an average of 13 years old with a Euro 3 standard and an average distance of 1.5 km in one direction. As expected, the GHG emission reductions are also small from this activity;

Outcome 4: Institutional transformation of government, businesses and general public to embrace sustainable transport – Capacity building
A satisfactory outcome with the training of 25 certified trainers for eco-driving techniques that started in September 2013 and was completed in September 2014; A satisfactory outcome has been achieved with a pilot training program for 80 drivers trained at one depot, as well as commercial bus and trucks drivers. The training provided a realization of 4.5% fuel savings. A moderately unsatisfactory outcome has been achieved with case studies for “replication of project elements”. These case studies have not been assembled into a format that can be disseminated to other cities and stakeholders for replication.

The emissions reduction potential from this component was estimated through the TEEMP model for eco-driving for its direct impact on transportation efficiency, GSP's eco-driving training program plans and the recorded fuel consumption reductions by GSP drivers under the Project's training activities from late 2013 to the EOP. The emission reduction estimates compare favorably to the GSP estimates of saving 4.5% of the 93,000 liters of diesel consumed each day in the fossil-fueled bus operations of GSP.

4.3 **Efficiency**	Rating: Moderately Unsatisfactory

The TE rated overall Efficiency as Moderately Satisfactory and Cost Effectiveness as Moderately Unsatisfactory. This TER downgrades efficiency to Moderately Unsatisfactory. According to the TE as well as the MTR (MTR, pg 36), there were serious delays at start up due to trouble recruiting Project managers, which affected the project design, as original project activities were implemented without the project's assistance. Furthermore, since time past, the project failed to stick to its original objective and outcomes after the inception report. Specifically, the efficiency of the carbon emission reduction goal was rated unsatisfactory, because the actual outcome was far from on track (TE, pg33).

4.4 **Sustainability**	Rating: Moderately Likely

The TE rated Sustainability as Moderately Unlikely, while TER slightly upgraded it to Moderately Likely. The difference in rating is associated with the financial sustainability, while some funds are not committed, others are very likely to be continued (TE, pg31).

- Financial resources: There is confirmed financing for next phases of SUTP/SUMP (TE, pg viii). Investments are being made in the expansion of the cycle network and pedi-bus systems for schools. There are concerns over financial resources available for the expansion of eco-driving training by GSP, which lacks funds for now. There are also concerns over availability of sufficient budget to finance sustainable urban transport measures.
- Sociopolitical: Despite frequent changes in the political directions of the city, there appears to be unanimous support for the development of the project, both from the government, NGOs, residents and other key players such as bus drivers.

- Institutional framework and governance: there were efforts to strengthen legislation on the safety of cycling in Belgrade. The capacity of the Secretariat of Transport has seemed a little bit weak sometimes in its capacity to manage the competion of a SUTP/SUMP (TE, pg32), but it doesn't really serve as a barrier to the project; it provides substantial oversight of the project.
- Environmental: overall, there are no environmental factors that would hinder the development of the project.

5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

With regards to co-financing, the TE is in strong agreement with the MTE assessment that there is only a vague definition of co-financing in this Project, and the resulting lack of activity to monitor co-financing on this Project. Co-financing of USD 3.299 million is credited to this Project by the Transport Secretariat, which was much lower than the 6.502 million that was planned. (TE, pg16).

For example, the government planned $6.502 million in-kind support for STB projects, but 0 was realized, luckily the project still recieved $3.29 mn in grants from the government for STB (TE, pg16).

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The STB Project suffered from a lag of 2 to 3 years between the actual Project design (2008-09) and actual implementation (February 2011 Inception Workshop), and during a time when many of the proposed activities were already being implemented without Project assistance. This placed the Project in a position where its activities would have less influence and less impact than originally planned (TE, pg36).

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

According to the TE, Sustainable development remains an objective of the Serbian Government and the Belgrade City Administration. Ownership of the Serbian Government and the Belgrade City Administration, however, has been weakened by the frequent changes in administrative and

counterpart personnel working on sustainable transport. As a result, development of the corporate memory for sustainable transport is notably weakened with the City (TE, pg30).

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 **M&E Design at entry**	Rating: Unsatisfactory

There were significant shortcomings in the M&E design involving indicators that did not meet SMART criteria. For the updated outcomes, the new indicators were output-based rather than being linked to the intended Project's contributions to reducing GHG emissions. For example, there was an absence of SMART targets such as 25 drivers trained in eco-driving techniques by the mid-point, and 50 drivers by the end of the project. (TE, pg9, pg17)

Given that the primary goal of most GEF Climate Change mitigation projects is to reduce GHG emissions, the M&E design at the entry point of the Project has been rated unsatisfactory by TE due to the lack of SMART targets for GHG reductions, and TER agrees with the rating.

6.2 **M&E Implementation**	Rating: Moderately Unsatisfactory

M&E implementation was rated as moderately unsatisfactory in the TE, and this TER agrees with that rating. According to TE, the MTE was conducted 3 years into the project when 81% of budget was already spent, making adaptive management difficult (TE, pg ix). Again, referring to the emission target, there were no adjustments made to improve GHG reduction monitoring during the implementation, which is a continuous setback from the design.

However, what was implemented positively about the M&E Plan was that all indicators, targets, baseline and risks were clearly outlined in Appendix F. Annual progress reports provided qualitative descriptions of issues that could confront the process (TE, pg58).

7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 **Quality of Project Implementation**	Rating: Moderately Unsatisfactory

UNDP was the project's implementing agency. The TE and TER both rates the quality of project implementation as Moderately Unsatisfactory mainly because of the following reason (TE, pg18):

- The STB Project had a number of implementation issues including: The Project being implemented 3 years after it was designed, and during a time when many of the proposed activities were already being implemented. This placed the Project in a position where its activities would have less influence and less impact than originally planned.
- The change of UNDP Project Manager only one year before the end of the STB Project that added to the difficulties of adaptively managing the Project.
- Substantive changes were made to the project design without further discussion or approval from the GEF; in that case, the changes also failed in considering how GHG reduction emission targets would be achieved (TE, pg 29).
- The STB Project was designed with unrealistic GHG reduction targets that were not achievable (TE, pg29).

7.2 **Quality of Project Execution**	Rating: Satisfactory

The project executing agency was the Ministry of Agriculture and Environmental Protection (MoAEP). The TE rates quality of project execution on the part of the MoAE as Satisfactory. This TER rates quality of project execution on the part of the Ministry of Agriculture and Environmental Protection as Satisfactory, and quality of implementation on the part of the City of Belgrade at moderately Satisfactory. Although the Implementation of the project was not very successful, based on evidence provided in the TE, the performance of MoAEP as the Executing

Entity on this Project is rated satisfactory. The role of MoAEP as the Executing Entity on this Project was to provide the guidance and Government support and raise the profile of the STB Project. There were three NPDs assigned from MoAEP to this Project for its entire duration. Their involvement on the Project was positive in their undertaking of initiatives and proposing actions to address a number of climate change related issues during the STB Project (TE, pg 18).

8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

Although the GEF objective targets carbon emission reductions, this project doesn't have much impact on it, mainly due to the inception delay and change of the project design. Despite the overly
ambitious direct GHG reduction target of 285,120 tonnes CO2eq/year, the actual direct GHG emission reduction of the Project was only 744 tonnes CO2eq/year by the EOP year of 2014 (TE, pg33).

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The project posed a positive impact on raising awareness within the City of Belgrade and a wide cross section of Belgrade residents on the benefits of sustainable transport modes. The City also promised to invest further on cycling infrastructure, etc. Moreover, the Project has drawn attention to the other large cities of Serbia who are interested in similar sustainable transport investments as a means of improving their urban quality of life (TE, pg33).

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. “Capacities” include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. “Governance” refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

a) Capacities: Changes in capacities are not mentioned in the evaluation.

b) Governance: The Project had a strong impact of raising awareness with MoAEP and other national ministries of the benefits of sustainable transport to the extent that GHG emissions need to be incorporated into their strategic policy framework (TE, pg33).

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

Unintended impacts were not mentioned in TE.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

According to the TE, eco-driving skills training for the City Public Transit Company of Belgrade (GPS) that has led to plans and budget for 2015 and 2016 to scale-up eco-driving skills to its pool of 3,500 bus drivers as well as the other drivers of public vehicles in Belgrade (TE, pg viii).

9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

According to the TE, key lessons learnt were (TE, pg 37):

- Thorough project preparations are essential for the setup of a successful sustainable transport project design and to minimize delays in implementation, which should include:
    - Thorough stakeholder engagement, and most importantly, an understanding of the institutions to be involved with the project.
    - Having access to stakeholder perspectives of urban transport, and determining their needs through questionnaires and surveys. No such information was collected in Belgrade.
    - Enabling project designers and implementers to setup meaningful and achievable targets that would effectively measure project impacts. Don't be overambitious.

- Mid-term evaluations need to be done at the mid-point of a Project; for a 4-year project, the latest a mid-term evaluation should take place is 2 years after its start. This is to allow the project an adequate amount of time to adaptively management implementation issues.

9.2 Briefly describe the recommendations given in the terminal evaluation.

According to the TE, there are six recommendations for the project (TE, pgx):

Recommendation 1: MoAEP and the City of Belgrade need to collect transport-related baseline data.

Recommendation 2: Institutional strengthening and funding are required to accelerate City's learning pace of EU standards for sustainable urban transport and the preparation of SUTPs/SUMPs.

Recommendation 3: Future assistance to Belgrade on SUT measures should focus on the following activities:
• Equipping all buses with fuel consumption gauges to support fleet skills for eco-driving;
• Synchronization of signals and priority signaling for public transit;
• Improving public transit services to Old City along with support for park-and-ride transit facilities in outlying areas.
• Pedestrianization of Old Belgrade to facilitate NMV modes of transport and a corresponding reduction in cars and road congestion;
• Improving MRV capacities within the City and MoAEP on monitoring GHG and other

emissions related to urban transport in Belgrade.

Recommendation 4: To sustain the development and operation of SUT measures in Belgrade, future assistance should also focus on identification of other revenue streams through an integrated "green cities approach" that will assist the Municipal Government in public transport subsidies.

Recommendation 5: The time for GEF Projects between approval and implementation needs to be minimized to reduce the risks of reduced project influence.

Recommendation 6: GEF should re-consider investment of its resources for sustainable transport projects under USD 2.0 million and less than 5 years in duration.

10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The discussion of project outcomes, impacts and achievement of objectives is thorough and properly compares actual project achievements against expected achievements.	**S**
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is internally consistent, and ratings are well for the most part well substantiated, with the exception of efficiency which is rated but for which an overall justification is not given (efficiency of each project component is rated separately)	**S**
To what extent does the report properly assess project sustainability and/or project exit strategy?	The report contains a convincing assessment of project sustainability, and replication approach.	**S**
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	Taken together, the lessons learned and the recommendations appear to be complete.	**S**
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The project contains total costs and costs per component, as well as actual co-financing used.	**S**
Assess the quality of the report's evaluation of project M&E systems:	The assessment of the project's M&E system was detailed and convincing overall, but focused in on the lack of monitoring of GHG reductions from activities. While this is a crucial point, other aspects of the m&E system which were functioning also deserve consideration.	**MS**
Overall TE Rating		**S**

11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).