Summary of the Terminal Evaluation Results

1. Outline of the Project				
Country: Socialist Republic of Viet	Project title: Project for Enhancing Training Capacity of Transport			
Nam	College (currently University of Transport Technology)			
Issue/Sector: Transportation	Cooperation scheme: Technical Cooperation			
Department in charge:	Total cost (as of May 2014): Approx. 630 million yen Partner Country's Implementing Organization:			
Economic Infrastructure Dept.				
Period of Cooperation: (R/D)	University of Transport Technology (UTT)			
October 1, 2011 – September 30, 2014	Related Cooperation:			
	- North-South Expressway Construction Project (Ho Chi Minh			
	City - Dau Giay Section, Da Nang - Quang Ngai Section, Ben			
	Luc - Long Thanh Section)			
	- Project for Capacity Enhancement in Road Maintenance			
	(2011 – 2014)			
	- Project for Strengthening Operation and Maintenance System			
	for Expressway (2011 – 2013)			

1-1 Background of the Project

The rapid economic growth in Vietnam has led to an increasing demand in the construction of high-standard highways and expressways and the massive development of large-scale transportation infrastructure projects. Since the future needs of the infrastructure construction market has been remarkably high, the Highway Master Plan (Prime Minister Declaration 1734/QD-TTg) vision 2020 targets to construct approximately 5,900 km highway network. However, the experience in highway and motorway construction is lacking so far, with few opportunities for workers to master the modern construction technology through experience in the construction site. In this regard, the lack of up-to-date and skilled personnel for construction projects can be addressed only through proper education and a systematic on-the-job-training (OJT).

At present, there are three educational institutions under Ministry of Transport (hereinafter referred to as "MOT") which provide education and training for engineers and technicians engaged in the management and supervision of highway construction - the University of Transport Technology (formerly the College of Transport) located in Hanoi (referred to as the UTT with 1200 to 1900 graduates per year), the Second College of Transport in Da Nang City (referred to as the COT2 with 300 to 500 graduates per year) and the Third College of Transport in Ho Chi Minh City (referred to as the COT3 with 300 to 500 graduates per year).

However, the present curriculum of UTT, including training, does not correspond to the recent needs of transportation infrastructure projects requiring modern technology. In order to cope with this, the strengthening of the curriculum, educational teaching materials, training equipment and the instructors' educational and training capacity are indispensable towards enhancing the graduates' capability and productivity in the construction industry.

Under such circumstances, the Government of the Socialist Republic of Vietnam requested to the Government of Japan in August 2008 for a "Technical Cooperation Project for Enhancing Training Capacity of Transport College (currently University of Transport Technology)" that focuses on the educational and training capacity development of the UTT. In response to the request, the

Government of Japan agreed to undertake the Project in April of 2009 while JICA carried out the preparatory study in March of 2010 to determine the details of the project components. The Record of Discussions (hereinafter referred to as "R/D") about the framework of the Project was signed in May of 2011.

1-2 Project Overview

(1) Overall Goal

- 1) Enhancement of high-graded highway (including expressway) construction capacity of graduates from Road and Bridge Construction Field, UTT
- 2) Enhancement of training capacity of other transport colleges in main subjects related to the field of road and bridge construction

(2) Project Purpose

Enhancing of training capacity in Road and Bridge Construction Field of UTT such that requirement from actual construction site will be reflected

(3) Outputs:

- Output 1: Improvement of contents and theory/practice teaching method of selected subjects list (1) and enhancing training capacity of lecturers who are in charge of the selected subjects list (1)
- Output 2: Issues and measures for subjects in selected subjects list (2) are defined
- Output 3: Establishing lecturers' capacity upgrading system in collaboration with construction enterprises

Selected Subjects List (1):

 Construction Material, 2) Geodesy, 3) Reinforced Concrete, 4) Bridge Inspection and Repair,
Road Foundation Construction, 6) Road Pavement Construction, 7) Road Maintenance and Operation, 8) Construction Site Management, 9) Occupational Ethics, 10) English in Construction, 11) Construction Geology, and 12) Soil Mechanics
Selected Subjects List (2):

 Material Toughness, 2) Bridge Construction, 3) Foundation Mechanics, 4) Structural Mechanics, 5) Labor Safety, 6) Ground and Foundation, 7) Bridge Design, 8) Road Design, and 9) Culvert Designing and Building

(4) Inputs

Japanese side:

- JICA Experts: 22 (19 assignments)
- Trainees received: 30
- Equipment: Approx. 350 million yen
- Local Cost: 31,420 thousand yen

Vietnamese side:

- Counterpart: 65
- Land and facilities: Working space and necessary facilities for JICA Experts
- Local Cost: Approx. 8.1 billion VND (approx. 40 million yen)

2. Outline of Terminal Evaluation Team					
Evaluation	Japanese Side				
Team	Name	Job Title	Occupation		
	Mr. Shigeki Miyake	Leader	Director, Transportation and ICT Div. 2,		
			Transportation and ICT Group, Economic		
			Infrastructure Dept., JICA		
	Mr. Kaoru Okada	Cooperation	Deputy Director, Transportation and ICT Div.		
		Planning	2, Transportation and ICT Group, Economic		
			Infrastructure Dept., JICA		
	Ms. Sawa Hasegawa	Evaluation	Consultant, Japan Development Service Co.,		
		Analysis	Ltd.		
	Vietnamese Side				
	Name Dr. Vu Ngoc Khiem		Occupation		
			Vice Rector, University of Transport		
			Technology		
Period of	4 - 17 May 2014		Type of Study: Terminal Evaluation		
Evaluation					
3. Summary of Treminal Evaluation Results					

3-1 Progress of the Project

Inputs from both the Japanese and Vietnamese sides have been provided as planned. Most of the project activities have also been implemented as planned and the remaining activities are to be completed by the end of the Project, September 2014. The Project consists of two phases: the first phase is during November 2011 - March 2013 and the second phase is during April 2013 - September 2014. During the first phase, the activities for Output 1 and 2 had been mainly implemented and the activities for Output 3 have been implemented during the second phase.

(1) Achievement of Outputs

- Output 1: based on the results of three indicators, Output 1 was already achieved at the time of Terminal Evaluation and the contents and theory/practice teaching method of Selected Subjects List (1) was improved as well as the training capacity of lecturers who are in charge of Subjects List (1) was enhanced.
- Output 2: based on the result of an indicator, Output 2 was already achieved as of 2012 when the improvement plans for Selected Subjects List (2) were developed. The Project has been implementing further additional activities on Subjects List (2) just the same development as Subjects List (1), which exceeds the expected output planned for the Subjects List (2).
- Output 3: based on the result of an indicator, the achievement level of Output 3 is in progress. While UTT concluded the agreement with Japanese engineering enterprises, including the specific plan and contents in terms of the cooperation system of training, the coordination of measures of training with Vietnamese construction enterprises needs to be elaborated more. The efforts to achieve Output 3 and establish the training system in collaboration with construction enterprises should be continuously made during the remaining period of the Project.

(2) Achievement of Project Purpose

- Based on the results of two indictors, the achievement level of Indicator 1 (Degree of capacity development of lecturers) is reasonable at the time of Terminal Evaluation and the capacity improvement of UTT lecturers has been recognized not only by lecturers themselves but also by JICA Experts and students. The achievement level of Indicator 2 (Implementation of training for lecturers in construction enterprises) is in progress and the practical OJT in collaboration with Vietnamese construction enterprises will be conducted by the end of the Project. The Project Purpose is likely to be achieved with the achievement of Output 3.

(3) Prospect for achieving Overall Goal

- Overall Goal 1: the data and information on two indicators of Overall Goal 1 was not collected at the Terminal Evaluation since students who had improved lectures and practices developed by the Project have not yet graduated from UTT. The results of two indicators will be obtained four or five years later, after the students actually graduated.
- Overall Goal 2: based on the results of two indictors, Oveall Goal 2 has been almost achieved at the time of Terminal Evaluation and the enhancement of training capacity of COT2 and COT3 is likely to be achieved in the near future.

3-2 Summary of Evaluation Results

(1) Relevance: high

- The Project meets the needs of its target, i.e. lecturers of UTT. They faced needs to teach their subjects more effectively and to develop their teaching capacity based on the practical knowledge, which is in line with the current reality of construction sites. Not only had the lecturers, UTT also had a need to improve its training capacity with upgrading from the college level to the university level. Besides, educational and training institutions in the road and bridge construction field including UTT, COT2 and COT3 are required to specifically develop human resources which correspond with the demands from market of construction enterprises. The Project has correctly responded to the needs of those involved.
- The Project is consistent with the national development strategy and plan (SEDS and SEDP) as well as policies on transportation development of the Government of Vietnam.
- The Project is consistent with Japan's Official Development Assistance (ODA) policy for Vietnam such as "Country Assistance Policy" and "Rolling Plan."

(2) Effectiveness: high

- The achievement of Output 3 by the end of the Project will definitely lead to the achievement of Project Purpose. The Project has successfully produced the products to ensure the proper enhancement of training capacity of UTT. The quality of new teaching materials are highly praised and positively endorsed by not only UTT but also other project stakeholders such as COT2, COT3, MOT and MOET.
- The institutional training capacity of UTT have been enhanced by the individual UTT lecturer's capacity development. Through involved in the whole process of developing the new teaching materials as well as participating in OJT in construction enterprises and training in Japan, they have gained the practical and new knowledge to effectively teach their subjects.

(3) Efficiency: relatively high

- Inputs from both the Japanese and Vietnamese sides have been provided as planned and the quantity, quality and timing of inputs are generally appropriate. The project activities have been implemented as planned and the achievement level of each output is also reasonable.
- The efficiency of the Project could be judged as quite reasonable if all the equipment had been fully utilized in the project activities. UTT was provided the sufficient quantity of fulfilling equipment by the Project, so they have a special responsibility for getting the most out of the equipment in order for the Project to be most efficient.

(4) Impact: positive

- The Project is on the right track to achieve its Overall Goal in the post-project period with the fact that it has almost achieved the second Overall Goal at this time and that the first Overall Goal is also expected to be achieved in the near future.
- As an example of project impacts on the policy level, the agreement between MOT and UTT was made for building up UTT to be one of the biggest institutions of MOT in training, researching and application of science achievements in the transportation field.
- As another example of project impacts, UTT students who had the lectures/practices using the developed new teaching materials of Selected Subjects List (1) and (2) got improved results in their final examinations in almost all subjects.

(5) Sustainability: positive

- Regarding the policy and institutional aspect, the enhancement of training capacity of UTT is going to be continuously supported by the Government of Vietnam. UTT is expected to be one of the biggest institutions for training in the transportation sector, so policy supports to UTT by MOT are ensured in the future as well.
- Regarding the organizational aspect, the project management system organized by PMU has been well functioned during the project period and it is quite possible for UTT to continue the activities for enhancing its training capacity in the future even without keeping the system of PMU after the Projet. The updating of textbooks and teaching materials as necessary as well as the training in construction enterprises are likely to be properly conducted and managed by the lecturers and management side of UTT.
- Regarding the financial aspect, the future training capacity improvement of UTT is also prospected to be positive since the UTT's budget which mainly consists of tuition fees and subsidy from MOT will be stable. Besides, UTT can afford to allocate the necessary amount of budget for maintaining the provided equipment by using own budget and incomes from construction enterprises by which the equipment will be utilized under the cooperation projects between them. MOT is also planning to prepare for part of budget for the next financial year in order to distribute the developed textbooks and teaching materials to all educational and training institutions under MOT, including COT2 and COT3.
- Regarding the technical aspect, UTT lecturers can confidently update the current developed textbooks and teaching materials as necessary in the future and are actually planning to not only update those for the college level, but also revise those for the university level. At the same time, they still need to have more practical experiences at the actual construction sites

and further polish the practical knowledge on their subjects, so it is important for them to have more opportunities for directly involved in the field experiences in the future as well.

- Regarding the equipment management, UTT voluntarily made the guidance books for some of equipment and also made the annual utilization plan as well as maintenance plan including cost norms for the equipment, and the UTT's technicians who are in charge of equipment operation, maintenance and management have followed the plans. The equipment is likely to be properly managed and maintained by UTT in the future as well.

3-3 Factors that promoted/ inhibited realization of effects

(1) Promoting factors

- 1) Factors concerning Planning
 - Appropriate design of the Project
- 2) Factors concerning Implementation Process
 - Good relationship between the Vietnamese and Japanese sides
 - Good support by the implementing organization
 - Autonomy of UTT

(2) Inhibiting factors

- 1) Factors concerning Planning
 - None
- 2) Factors concerning Implementation Process
 - Difficulty to conduct the frequent and long-term training in construction enterprises

3-4 Conclusion

Based on the findings of the Terminal Evaluation, the Evaluation Team concludes that with the efforts of both Vietnamese and Japanese sides, especially with the diligent and sincere works of UTT, the Project has been successfully implemented and got sufficient effects, and will end in September 2014 as planned. The Project is expected to achieve its purpose within the project period and on the right track to achieve the Overall Goal in the post project period. The results based on the five evaluation criteria of the Project are also good and positive. UTT is expected to be one of the biggest institutions in the transportation sector in Vietnam and highly prospected to make best use of the project achievements and continuously make steady progress in the future as well.

3-5 Recommendations

- (1) Increase of collaboration with construction enterprises by making full use of machinery and equipment
 - UTT is requested to make continuous efforts to implement the training in construction enterprises under the support of MOT, by utilizing machinery and equipment provided by the Project in the training, so as to become one of the biggest institutions of MOT in training, researching and application of science achievements in the transportation field based on the agreement between UTT and MOT.
 - It would be reasonable to consider that outside lecturers from construction enterprises or trained UTT lecturers will conduct model practicing in UTT as an alternative means of OJT in

the actual construction sites, so that the lecturers and students can improve the level of understanding on the actual usage of machinery and equipment in construction sites.

- (2) Improving analytical skills for utilizing the data obtained from the new equipment
 - It is advisable that UTT lecturers exploit to the full opportunity of technology transfer from the JICA Experts in charge of "Equipment Management" who are scheduled to be dispatched from June to July 2014, so as to improve their analytical skills for utilizing the data obtained from the new equipment.

(3) Modification of PDM

- The Evaluation Team proposed a change of the Objectively Verifiable Indicator 1-2 for the first Overall Goal and PDM version 1.3 based on the change.