

## **Third Party Evaluator's Opinion on Hangzhou-Quzhou Expressway Construction Project**

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### **Criteria-1 Effectiveness**

The increase in annual average traffic volume was sharper than anticipated, increasing by 15% compared to the projected increase of 9% on the Hangzhou-Jinhua section and increasing by 20% compared to the projected increase of 7% on the Jinhua-Quzhou section. This is regarded as a great success for a highway project and this also indicates the effective contribution of the project to the community, including stimulation of the regional economy.

While the number of accidents is increasing, the number of fatalities has decreased. With the number of vehicles and traffic volume having increased dramatically in recent years, the Hangzhou-Jinhua-Quzhou Expressway Company has implemented traffic safety measures, including installment of road signs in areas identified as having many accidents. This seems effective to reduce the accident rate and to decrease the fatalities as shown by the data show.

The financial internal rate of return (FIRR) at the time of appraisal was 12.96%; while in ex-project evaluation the FIRR was recalculated at 17.98%. The economic internal rate of return (EIRR) at the time of appraisal was 15.74%, while the EIRR was recalculated as 21.90% at the time of ex-post evaluation. That the FIRR and EIRR greatly exceeded the value estimated at the time of appraisal shows great success economically of this project.

### **Criteria-2 Sustainability**

The operation and maintenance after completion of the expressway are being handled by the Hangzhou-Jinhua-Quzhou Expressway Company (HJQEC). HJQEC is an organization that specializes in the operation and maintenance of highways with experienced engineers working for the company. Of the engineering personnel, 10% have senior engineer qualifications and 35% have engineer qualifications. HJQEC has been acknowledged by the Ministry of Communications (MOC) and the Zhejiang Provincial Communication Department (ZPCD) as having an "excellent" quality control system. HJQEC treats high quality operation and maintenance as its top priority. HJQEC's performance and capable staff will enable good operation and maintenance of the express high way. The decrease of fatalities also indicates that the company has done a good job.

The current volume is about 35,000 vehicles per day. The traffic volume on the expressway has exceeded the planned amount and the annual toll income for 2005 was 1,550 million yuan. This provides a very good cash flow to the operation and maintenance costs for the sustainability of the project. It is strongly recommended that the money is effectively used for safer transportation and environment protection.