

Job Creation, Skills Development and Empowerment in Road Construction Rehabilitation and Maintenance

RPF November 11 – 12

CSIR, Pretoria

HVS Technology Development Programme

APT Strategy 2006 - 2009



Focus Areas

- Sustainable Development and the environment (including cold recycling)
- **Labour-intensive construction**
- Asphalt performance
- Vehicle-pavement interaction (VPI)
- Provision of low volume roads
- Concrete pavements
- Structural Pavement Design Method

Background to Manual

- EPWP
 - Employment opportunities and training for >1 million unemployed in 5 years
 - Increased labour content on government funded projects
 - Application of appropriate labour-intensive technologies
 - Focus on low volume roads, pipelines, stormwater drains and urban sidewalks
 - Perception of inferior quality, cost and productivity
 - RAs generally only allocates LVRs to LIC&M at the exclusion of the larger projects to minimise risk
- Developments in LIC technologies, labour optimisation and project management techniques have improved significantly
- Now possible to integrate labour as a critical & measurable component for the whole of the road construction sector
- GDPTRW best-practice guideline for formal and emerging sector to promote sustainable job creation and empowerment in **all road construction, rehabilitation and maintenance projects**

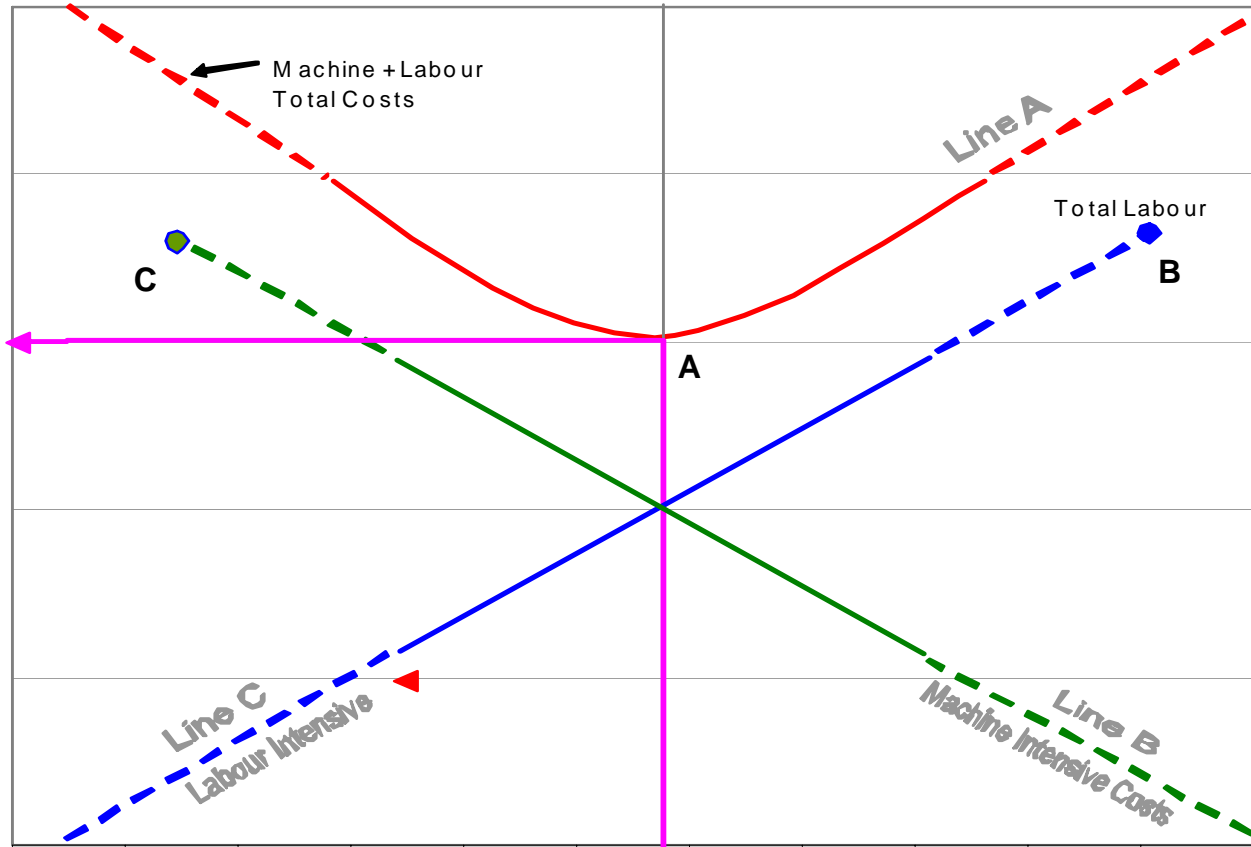
Scope of Manual

- **To provide guidance to Road Authorities and their Consultants on:**
 - **Optimal labour components for specific design elements;**
 - **Appropriate contract documentation, specifications and tender evaluation procedures to encourage the use of labour;**
 - **Legal requirements related to the employment of unskilled and semi-skilled labour;**
 - **Quality and cost of labour related to group tasks and group balancing:**
 - **Training, mentoring and incubation programmes including the current requirements**

Benefits

- Optimisation of the use of labour on all projects (new construction, rehabilitation and maintenance);
- Increased sustainability of job opportunities through the optimisation of labour on all projects;
- Increased use of appropriate labour-intensive technologies;
- Increased involvement by the formal construction sector in job creation and mentoring of emerging contractors;
- Improvement in performance of the emerging sector through, training, mentoring and incubation

Labour Optimisation



0% ————— Labour Component —————> 100%
 100% <———— Machine Component (Level of Mechanisation) ————— 0%

Sustainability of job creation

- Current programmes (eg EPWP)
 - Jobs created were temporary
 - Skills lost
- Manual encourages the creation of sustainable skills and jobs for the road sector through:
 - Increasing the total labour input on all projects;
 - Increasing the skills levels of emerging contractors and labour through training, mentoring and incubation;
 - Funding of labour-intensive programmes through the Departmental budget rather than ad hoc special programmes;
 - Involving the formal construction industry in labour-intensive construction, in joint venture with the emerging contractors

Status of Document

- Draft document available for review (16 May)
- Circulation of document to reviewers for comment (return end June)
- Workshop to discuss comments on 8 Sept '08
 - Method statements (Appendix 2 – 26)
- Comments incorporated and draft manual finalised by 31 October for release to industry
- Launch the document in early 2009
- Electronic copy of manual on HVS web site www.gautrans-hvs.co.za

Reviewers

- **GDPTRW**
 - EPWP
 - Roads Dept
- **APT S Com review**
 - S Oloo – KZN DoT
 - N Swarts – Limpopo Road Agency
- **Industry**
 - Sabita Consultant, Contractor & Supplier members
 - C&CI involved in compilation of document