



## LIGHT RAIL TRANSIT & TRAMWAY SYSTEMS TRAFFIC ENGINEERING DESIGN

### 轻轨交通和有轨电车系统的交通工程设计

CONNECTING COMMUNITIES TO SUSTAIN DEVELOPMENT  
促进社区的可持续发展

**SYSTRA**  
MVA 

# LIGHT RAIL TRANSIT (LRT) AND TRAMWAY PLANNING

## 轻轨及有轨电车交通规划

Patronage and Revenue Forecasting  
客流量与收入预测

Fare Sensitivity and Optimisation  
票价敏感度及优化

Affordability Studies  
可负担性研究

Ticketing and Fare Collection Systems  
票务及收费系统

Economic and Financial Assessment  
经济及财务评估

Station Planning and Design  
车站规划及设计

Pedestrian Micro-Simulation for Design Optimisation  
行人仿真优化设计

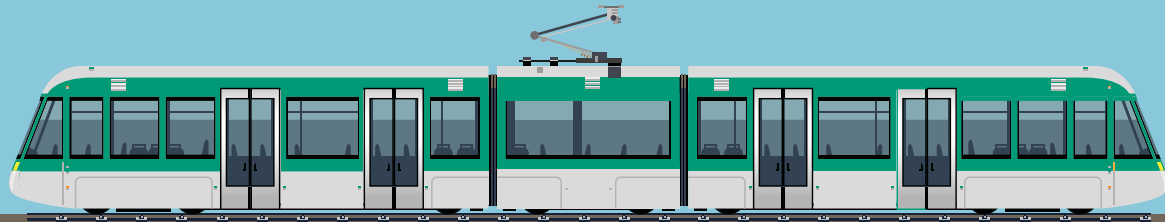
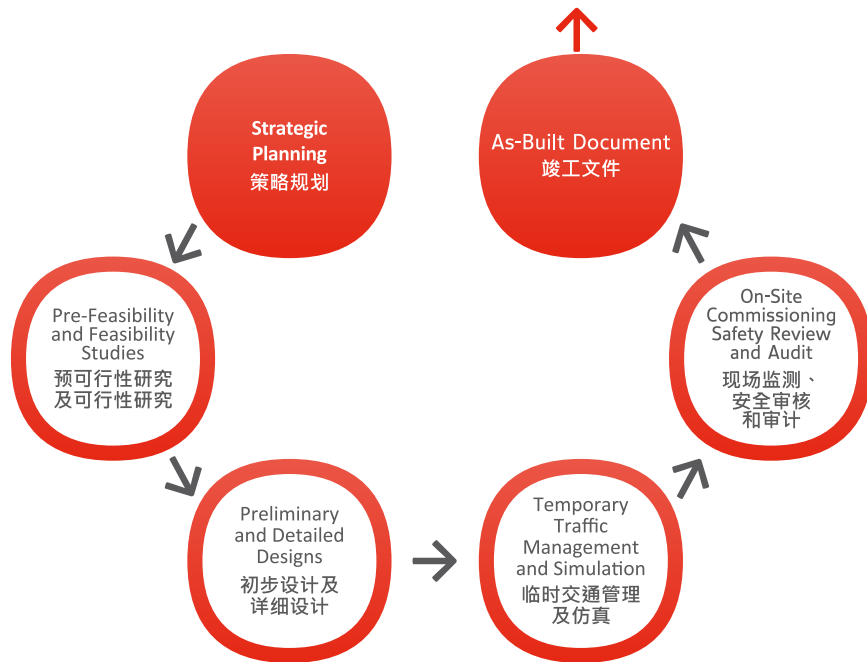
Feeder Systems and Transport Interchange  
接驳系统及交通换乘枢纽

Pedestrian and Access Studies  
行人及通道研究

Traffic Management During Construction  
施工期间的交通管理

MVA is a SYSTRA Group company with over 30 years of Light Rail Transit (LRT) planning experience across Asia. SYSTRA has 50 years of railway engineering experience around the globe. Together we can offer comprehensive railway related consultancy services from concept to implementation including, Planning Studies, Alignment Evaluation, Patronage Forecasting and Traffic Engineering Design for Stations or Junctions.

MVA是赛思达(SYSTRA)集团的一家公司，在亚洲区的轻轨或电车交通规划方面，具备30余年的相关经验，而赛思达在全球铁路工程方面拥有50年的丰富经验。MVA与赛思达的联合，可提供从概念到实施阶段的综合铁路咨询服务，包括线路路线规划、走向评估、客流量预测及车站/交叉口的交通工程设计等。



# LRT AND TRAM EXPERIENCE IN ASIA

## 轻轨及有轨电车交通规划



● Tuen Mun to Yuen Long LRT, Hong Kong  
香港屯门至元朗的轻轨交通



● LRT Junction Mj15 Traffic Diversion Scheme, Hong Kong  
香港轻轨交叉口Mj15的交通分流方案



● Ping Shan LRT Junction Design, Hong Kong  
香港屏山轻轨交叉口设计



● Tin Shui Wai LRT Junction Design, Hong Kong  
香港天水围轻轨交叉口设计



● Tuen Mun LRT Phase 2 - Detailed Design and Site Supervision, Hong Kong  
香港屯门轻轨二期详细设计与工地监管



● LRT Regional Link Diversion Traffic, Hong Kong  
香港轻轨交通区域连接分流交通



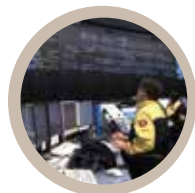
● Hong Kong Tramways  
香港电车研究



● Wuhan Medium-capacity Transit Study, Hubei China  
中国湖北武汉中运量交通研究



● Johor Bahru and Melaka LRT Studies, Malaysia  
马来西亚新山市及马六甲轻轨交通研究



● Training Course for Transport Department and MTRC Technical Staff, Hong Kong  
香港运输署及港铁公司技术人员培训课程

### • Regional Coverage

区域范围的交通覆盖

### • Network and Service Planning

线网及服务规划

### • Passenger Demand Forecasting

乘客需求预测

### • Layout and Facility Design

布局及设施设计

### • Pedestrian Planning

行人规划

### • Transport Simulation

交通仿真

### • Training

培训

# JUNCTION LAYOUT DESIGN, TRAFFIC CONTROL, PEDESTRIAN SYSTEM AND SAFETY AUDIT

## 交叉口布局设计，交通管制，行人系统及安全审查

### ○ Junction Layout Design & Traffic Control 交叉口布局设计及交通控制



**Tuen Mun to Yuen Long LRT Traffic Management Implementation**  
香港屯门至元朗的轻轨交通管理实施



**Light Rail Extension**  
轻轨延线



**Tin Shui Wai Further Development - LRT Phase 4 and Reserve Zone Extension**  
天水围地区开发 - 轻轨交通四期及预留区扩展

### ○ Traffic Management and Micro-simulation 交通管理及微观仿真



**Master Plan Development and Integrated Public Transport System, Brunei**  
文莱总体规划发展及一体化公交系统



**Hong Kong Tramways**  
香港电车



**West Kowloon Terminus (WKT), Hong Kong**  
香港西九龙总站

### ○ LRT Traffic Safety Audit 轻轨交通安全审查



**Light Rail**  
轻轨



**Junction**  
交叉口



**Light Rail and Pedestrian**  
轻轨和行人



# OUR STRENGTHS

## 我们的实力

We offer a deep and broad understanding of the entire LRT/Tramway planning and design process from the pre-feasibility stage to detailed design and implementation stages.

We collaborate closely with city planners, operators, developers, civil engineers and contractors to plan, design and implement LRT/Tramway systems.

从预可行性研究阶段至详细设计和实施阶段，我们可对整个轻轨/有轨电车规划及设计过程提供深入而广泛的咨询服务。

我们与城市规划师、运营商、开发商、土木工程师及施工单位紧密合作，共同对轻轨及有轨电车系统进行规划、设计及实施。

- **Route and Network Structure**  
线路与铁路网结构
- **Patronage Forecasting**  
客流量预测
- **Alignment Evaluation and Analysis**  
布局评估及分析
- **Junction Geometrical Layout Design, Junction and Optimization Control**  
路口几何布局设计及交叉口优化控制
- **Traffic Management and Micro-Simulation**  
交通管理及微观仿真
- **Station and Platform Design**  
车站和站台设计
- **Junctions Safety Review and Audit**  
交叉口安全审查

We link our design and forecasting expertise with operational experience to deliver viable and practicable projects.

我们将设计及预测专业知识与实际操作经验相结合，从而提供切实可行的项目研究成果。



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