Automated Capture of Freight Origin/Destination Data using License Plate Readers

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1. Origin/Destination Data
2. Phase I
3. System Hardware
4. System Software
To utilize LPR technology for collecting O/D Data of Freight using highway gantry-mounted cameras.
O/D
When did it leave and from where?
When did it arrive and to where?
ORIGIN - DESTINATION DATA

- Planning
- Design
- Congestion Pricing
- Maintenance
- Cargo Theft
- Enforcement
- Intermodal
- Port Management
- Traffic
- Average Speed
LARGE number of models is Available.

But where would the DATA come from?!
Getting RELIABLE Origin/Destination Data is expensive and time consuming.
Installation
Phase I
System Design Challenges

1. Selection of Camera Systems (light, resolution ..)
2. Selection of Triggering Mechanisms
3. Power Source
4. Software and acquisition speed
5. OCR Target: Plates, Container Numbers …etc.
6. Safe connection to Gantries
7. Sign structure Issues
7) Sign structure Issues
7) Safe connection to Gantries
Image Acquisition
Rear License-Plate Reading
Rear License-Plate Problems
Rear License-Plate Problems
3) Triggering Technology

[Image of highway gantry and camera with a semi-truck]
3) Triggering Technology
Installation
Field Test
Field Test
NIGHT READING
Solar Power
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ANY QUESTIONS?