

Trucks Under Siege

CASE STUDY

The Costs of Crime and Insecurity to the Transport Industry in Papua New Guinea



THE WORLD BANK

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This paper has been prepared as part of a broader study to understand the socioeconomic costs of crime and violence to businesses, government agencies, Civil Society Organizations (CSOs) and households in PNG. This work was requested by the Prime Minister and was undertaken with extensive input from international partners and local stakeholders.

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CASE STUDY

The Costs of Crime and Insecurity to the Transport Industry in Papua New Guinea¹

Transport as the lifeblood of the economy

The Highlands Highway is a lifeline for the country's economy, for businesses, and for the three million people who live in the Highlands' provinces. As in any country, the movement of goods and people around the country—in particular between commercial towns—is critical factor for the functioning of the economy. Transporting people and goods, the Highlands Highway is used by trucks connecting the region's major port, Lae, to Madang and then it carries on into the resource-rich Highlands, across limestone cliffs, through valleys and along hair-raising mountain passes. Without railways and with air travel prohibitively expensive for most people and many companies, PMVs² ply the route carrying people between their hometowns and the commercial centers. Trucks carry food products and other essential supplies as well as agricultural produce, including Highlands' coffee—a major income earner for the rural population.

With both infrastructure and law and order identified as critical development constraints³ the transport and haulage industry is one that is seriously affected. Interestingly, it is also

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² Public Motor Vehicles, or mini vans.

³ Papua New Guinea, Critical Development Constraints, Country Diagnostic Series, 2012, Asian Development Bank: Manila, available at http://www.nicta.gov.pg/public_inquiries/Retail%20Service%20Determination%20Papers/Digicel%20Response%20ADB%20PNG%20-%20critical%20development%20constraints.pdf.

The transport and haulage industry is one that is seriously affected... it has [also] found innovative ways to manage the risks.

an industry that has found innovative ways to manage the risks. We spoke with two locally owned, medium-sized haulage companies about the challenges they face in their business operations. Their stories provide a fascinating look into what it takes to run a haulage firm in PNG, and the day-to-day risks faced by managers, drivers, and other staff.

The *first company* operates a fleet of roughly 100 trucks. The trucks are driven by highly trained and constantly monitored drivers along the 700km highway from Lae to the mountain town of Porgera in Enga Province, home to the country's second largest mine site, and on to the populous towns of Mount Hagen and Goroka, or to Hela Province, where the PNG LNG project—the country's largest natural resource project—is based. The *second firm* in this case study also hauls goods along the Highlands Highway through Goroka, Mount Hagen, and then up into either the Southern Highlands or into Enga Province. The goods include bulk diesel and packed/drummed Jet A1, bulk gas, cigarettes, and some general

Quick Facts: Transport Infrastructure in PNG

Population of PNG: PNG is one of the most isolated countries in the world. With a population of more than 7 million and total land area that is roughly the size of California. 4 out of 5 people live in rugged mountainous or coastal terrain, many without even rudimentary access to roads, and as such to markets, and public services such as health clinics and schools.

Main modes of transport: Public transport is limited, the most common form being Public Motor Vehicles or PMVs (mini-vans and small buses). There are a large number of PMVs operating that are privately run. Air services, while available across many parts of the country, are prohibitively expensive for most people. With 6,500 km of coastline, water-transport is an important means of moving people and goods. Some towns in maritime provinces are accessible only by sea. Inland waterways cover approximately 10,000 km. Some communities along the Sepik, Fly and Ramu river systems can only be reached by dugout canoes. There are no functioning public railways.

Road network: Papua New Guinea's road network covers some 16,540 km; roads are generally poorly maintained and provide unreliable, infrequent, high-cost transport. There are a handful of major highways, but they become unusable in wet weather. Vehicle breakdowns occur frequently and vehicles are commonly subjected to robbery, looting and car-jacking. The Highlands Highway is the longest road in the country, linking the port towns of Lae and Madang to the Highlands region.

Women and transport: Poor transport networks and unsafe, unreliable transport services constrain women's and girls' opportunities in particular. The issues include limited access to health and education services, limited access to economic opportunities and an increased vulnerability to gender-based violence, HIV and other STIs.



dry goods such as foodstuffs. Most trips involve a simple pick-up from a point of origin with delivery of the goods to a final destination, unloading or discharge the goods and then returning the trucks to a home base. What could possibly go wrong?

What could go wrong?

To start with, road conditions are generally poor. Transport infrastructure in PNG suffers not only from insufficient investment, but the quality of construction and maintenance of roads is affected by low standards and corrupt practices on the part of contractors, elite capture of local government budgets and a 'leakage' of funds throughout the public finance management system. Potholes, landslides, broken bridges and other roadblocks, especially during the rainy season, can disrupt travel. Stopping en route presents serious risks to the trucks-equipment-cargo; drivers regularly report being 'held to ransom' for payouts when trucks have had to make

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“We are in a high cost-high risk industry with many enemies within... [you have to]... manage the business both well and diligently or, get out all together.”

unscheduled stops because of the road conditions. Where there are potholes—sometimes man-made—it is easy for trucks to tip, at which point looting becomes a major hazard.

Another hazard and expense is that the Highlands Highway passes by hundred of villages and landowners groups. Claims for compensation from villagers are extremely common, in response to complaints about drivers who allegedly ran over a pig or perhaps hit a person, for example. Claims may come out of the blue and be unsubstantiated, but negotiations with the aggrieved party/parties can go on for months. As one of the businesses explained “We get threats of violence, threats to have trucks taken hostage, threats to have the road blocked, drivers threatened and assaulted, threats to have trucks burnt.” Claims are even made for actions of third parties; for example if fuel is siphoned-off by looters, there often follows a claim from the village *in situ* for environmental damage, or a claim for compensation might be presented to the firm if a truck was hijacked or stolen and then crashed and caused damage. For one of the transport companies studied here, these payments amount to roughly K200–K500 per incident—or approximately K1–K2 million a year. Costs are also incurred in the additional time each journey may take due to road blocks for payouts, tribal fighting, and unscheduled stops by drivers to visit family and wantoks. When travelling in a convey to mitigate risks, the convey must travel at the speed of the slowest truck, and a truck may have to stop and wait en route while other trucks ahead sort out claims with landowners.

Along the Highway also exists a buoyant black market economy in stolen fuel. A constant siphoning-off of fuel (either by drivers themselves or by ‘looters’ along the route) can cost a haulage company as much as US\$1 million a year—outgoings which are simply factored into the costs of doing business. Yet fuel is only one of the items that is regularly stolen from trucks themselves: fire extinguishers, spare wheels, driving lights, radios/stereos and batteries all go missing on a regular basis. Theft from the main office or the depots is also common; “we are not talking here about the office stapler or calculator going missing but things such as expensive tooling, spare parts, lubricants, tires. You name it, it has the potential to go missing.”

How can we manage the risks?

Like other successful Papua New Guinean haulage companies, these firms have had to develop tools to mitigate and manage the impact of these risks. For example:

- **The entire fleet is electronically monitored 24 hours a day, 7 days a week** from a coordination center, by a contracted firm. The hardware and software were developed for the businesses and are owned by them. As one business' noted; "it is expensive, but if it saves one incident, it is worth every dollar spent."
- **The trucks are specially fitted with high-tech equipment.** An advanced GPS mapping system tracks the movements of every truck, from start to finish of its journey, and flags anywhere they may go off-route. Drivers must be safely parked in one of the depots in Mount Hagen, Goroka, or Lae by midnight, at which point systems, and engines, are shut down remotely. Remote shutdown can also be employed if a truck goes off route or is reported stolen, and can only be restarted by workshop personnel. Other modifications made to the trucks include to the springs, wheels, and suspensions to cope with the adverse road conditions. For the two firms involved in this case study, their systems are top-range, technologically far exceeding comparators in more developed economies. All fuel lines and points of discharge are securely locked and tagged.
- **Both businesses include on their payroll public relations or 'road liaison' officers,** who facilitate negotiations at strategic sites along the route in order to assist the safe passage of trucks. They patrol the Highway, watching for potential trouble, handling compensation claims. One of the firms employs approximately 20 of these valuable facilitators. For one firm, payment for their services add up to between 3,000 and 4,000 Kina (US\$350-\$500) a week—up to US\$25,200 a year. Whilst one of the firms questioned how effective these employees are, they are generally considered a

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An advanced GPS mapping system tracks the movements of every truck

'Road liaison' officers are generally considered a 'must-have' and are drawn from local communities.



Insurers often refuse to cover transport along road sections considered particularly high-risk.

Assets are protected with expensive infrastructure, monitoring systems, and procedures

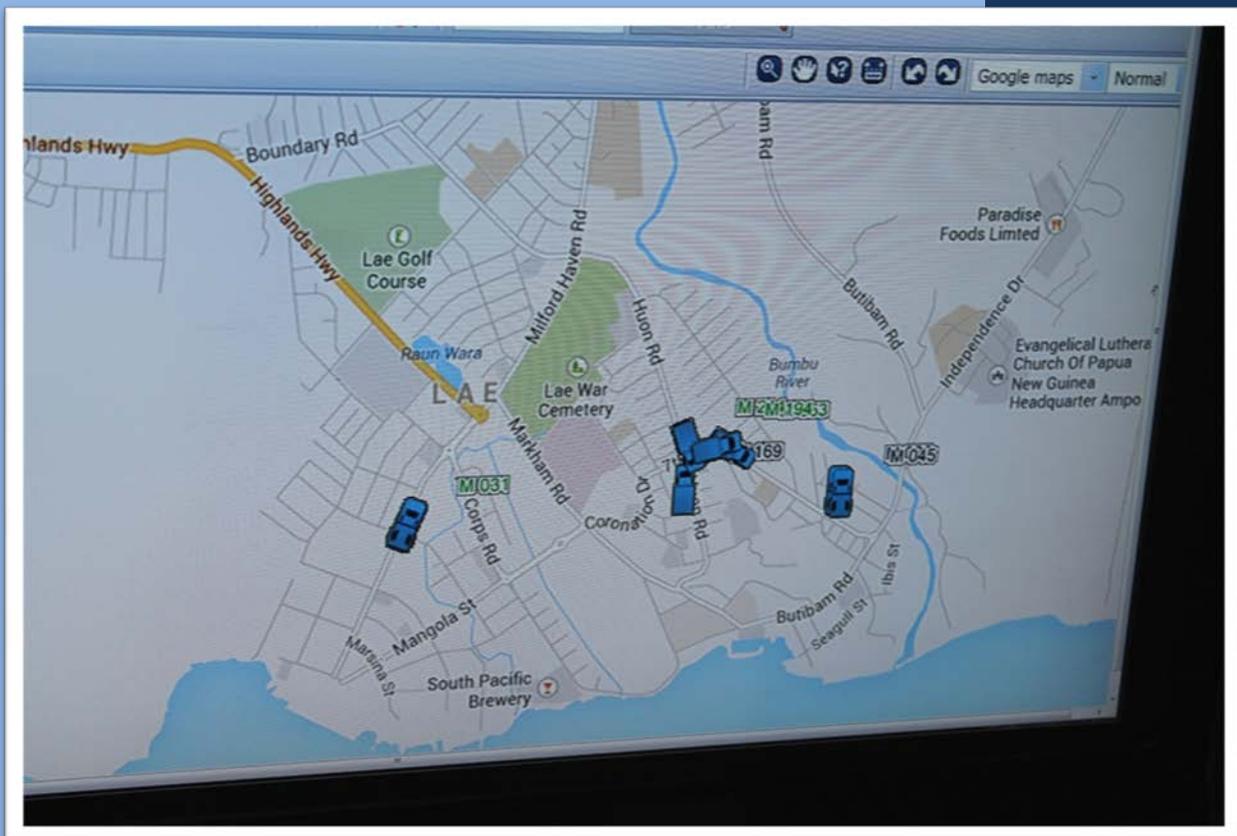
‘must-have’: they are drawn from the local communities themselves and this is key to maintaining a good relationship with landowners.

- **The company pays a high price for insurance.** Given the large number of risks that affect every journey, insurance comes at a high price. Insurance companies often refuse to cover transport along certain sections of the road that are considered particularly high-risk, so any costs from losses or damage incurred on these stretches must be absorbed by the firm.
- **Police are used to report crimes,** particularly for the deterrent effect this has. However the firms reported having to pay for this public service; “we look after their vehicles—fuel, tires, servicing, and in some cases payments to the police to allow them to attend issues on our behalf...they are underfunded.”
- **Assets are protected with expensive infrastructure;** haulage companies typically invest in a range of hardware and systems—steel grills, access bolts, tagging

and laminated windscreens, among other security measures. One of the firms has its own fuel farm for ensuring quality fuel, and uses innovative ways of securing all fuel lines.

- **Monitoring systems and procedures** are also used and rigorously followed to prevent theft from the workplace. Internal monitoring systems in all depots, external gate control by a security firm and even internal laundry facilities for uniforms illustrates how operational costs can add up even for office base.
- **Investing in the human resources of the firm is critical** to compensate for deficits in the education system and to help reinforce good practices and counter those social pressures and mores that compromise the effective running of a haulage firm. The drivers are given rigorous training across all levels of the business, from Depot management and controls, local or urban haulage work through to highway work. Skills training in truck management, driving technique, care and maintenance,

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security alerts/awareness, personal and work-place safety, and the like are on going. One of the firms reported having their own in-house trainers. They also sponsor apprentices and trainees for acquiring vocational skills—applicable fees, travel, accommodation, and meals for apprentices and trainees are fully paid for.

- **Truck drivers are amongst the most highly paid workers in the country**, partly as a reflection of the hazardous nature of their job; they can earn up to K100,000 per year. In addition to paying a generous salary, one of the businesses uses an incentive system using lucrative performance-linked payments to discourage stealing of fuel and complicity in looting and stealing.
- **Private security escorts are routinely employed** for high-value cargo, such as cigarettes. They accompany trucks on their journey—especially from the LNG site. Security firms also help securing the office and depots, and act as escorts through areas where there are tribal fights and roadblocks caused by civil unrest. Even security vehicles however are not immune to being targeted. On occasion they have also on occasion been subject to demands and robberies on Highlands' roads.
- **Local staff working for haulage firms are transported to and from work** in order to reduce their risk of becoming victims of crime and violence en route from home to the workplace. One of the firms operated their own internal bus transport fleet, dedicated to home to work pickups and drop-offs.
- **Measures are taken to ensure the safety of female staff as they face heightened and special risks.** Both firms noted that security in getting to and from the work place is paramount for female staff. Both firms are also highly cognizant of issues concerning safety and welfare faced by female staff outside of the workplace. Training in relation to health awareness, domestic violence, and

general well being is offered to both female and male staff.

- **One of the businesses noted a heavy reliance on international staff at senior levels**, in part to mitigate perceived collusion and pressures from wantoks. Costs for internationals are high, as on top of salaries that incorporate 'hazard pay' they often require housing, catering, and fly-in/fly out arrangements.

Costs accumulate quickly, for private security, for lost fuel, to replace stolen parts and equipment, pay insurance, repair damaged assets, for running depots, investing technology and security stations, for compensation payouts, and to remunerate its drivers and other staff who often face serious risks every time they set out on the Highway.



How does this affect business and the economy?

Limiting business opportunities, inflating costs for consumers

These additional costs paid by businesses are then passed onto consumers in the form of inflated prices. A tin of tuna fish, one of the staple foods of many households in PNG can cost as much as 6 kina in Goroka. This price is inflated by the costs that the firms in the supply and distribution chain pass on. Without these additional costs due to crime and security, consumer products would be cheaper and the overall cost of living less. Ultimately, it is the ordinary person in PNG citizen who pays.

But it doesn't stop there.

Holding our economic growth hostage

As these two businesses made clear, the challenges and additional costs they face in dealing with crime and insecurity present serious constraints to business expansion, and without expansion, job creation cannot occur. Prospective new suppliers also face significant barriers to market entry. As the owner of one of the companies explained, he is grateful that he has the capital to cover security costs. While insurance is expensive, proportionately it is more affordable for a larger firm that has already invested heavily in security infrastructure. "I started out as a truck driver 25 years ago and built up my business from there," he says. "Now if I was looking to expand and diversify, I couldn't do it. It's the smaller firms that are the most fragile, those getting started. They can't afford to carry these sorts of risks."

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