

# THE ABANDONED CARS OF POHNPEI

## Reflections on a small island economy and environment

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**ABSTRACT:** Sustainability is a challenge for many small islands, and particularly small island developing states, where resources are limited but challenges abundant. One such challenge is that of the abandoned motor vehicles throughout the islands of the Federated States of Micronesia, in the north Pacific. Pohnpei, the main island of Pohnpei State, has over one thousand junk vehicles decaying by its roadsides, but what are the economic conditions that have led to their presence, what are the environmental issues that these vehicles now present, and what are the barriers to dealing with them? By considering these issues, the abandoned vehicles of Pohnpei provide a unique lens through which to explore small island sustainability.

**KEYWORDS:** Federated States of Micronesia, Pohnpei, island sustainability, waste management, small island developing states

### Introduction

Pohnpei is the main island of Pohnpei State, one of the four states of the Federated States of Micronesia (FSM) along with Chuuk, Kosrae and Yap. At 334 km<sup>2</sup>, Pohnpei is the largest of the FSM's 607 islands situated within nearly 3 million km<sup>2</sup> of the tropical North Pacific (Figure 1). It is home to both the national capital, Palikir, and 35,000 of the approximately 102,000-strong FSM population. The people of the FSM have a long history, as exemplified by Nan Madol, the UNESCO World Heritage listed collection of megalithic basalt stone structures whose construction began around 900 years ago. This was the ceremonial centre of the Saudeleur dynasty, which first brought government to Pohnpei. The FSM of today is a much younger sovereign nation, having ratified its constitution in 1979 following centuries under various colonial powers and a period as a United Nations Trust Territory following World War II. Aspects of the FSM's post-independence economy and environment, and how they are intertwined, are writ large on roadsides throughout the main islands of the four states in a growing number of abandoned and decaying cars. The photographs included here, taken during a research trip to Pohnpei in the spring of 2019, provide a unique lens through which to consider island sustainability and, specifically, the interwoven issues of economy and environment in Pohnpei and the FSM.

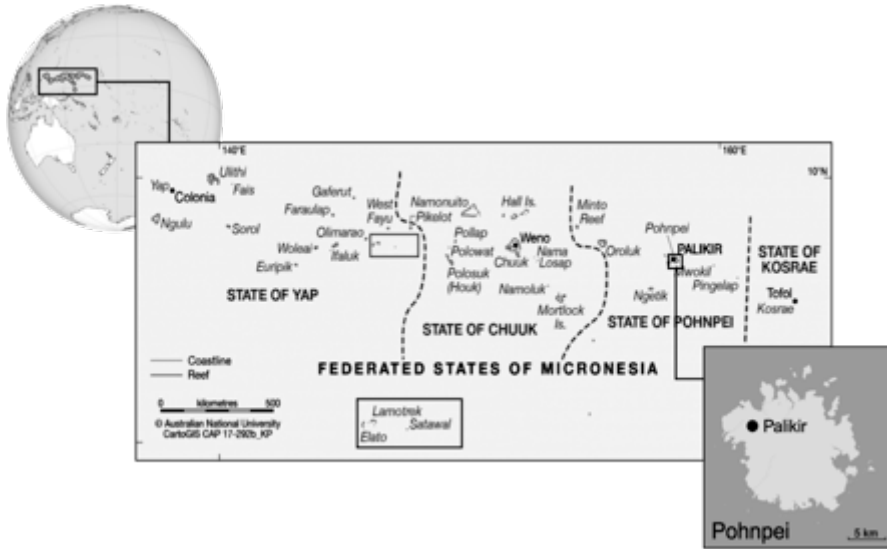


Figure 1 – Composite map of the Federated States of Micronesia and Pohnpei island.<sup>1</sup>

### Looking through the lens of abandoned cars

Figure 2 presents an all too common view in Pohnpei; a long-abandoned car sitting like an unintended mile marker beside the 78 km main road that circles the island. One might consider this a surprising view on a remote tropical island; the stripped and rusting skeleton of a car is at odds with the backdrop of tropical foliage. Yet abandoned vehicles such as this are not unique to Pohnpei, or even to the FSM. They are a recognised issue in numerous places around the world, particularly islands. Considered a problem throughout the countries of Micronesia and far beyond, including Hawai'i, the Torres Strait Islands of Queensland, Australia, Kinmen Island, Taiwan and St Croix in the US Virgin Islands, abandoned vehicles present challenges to local sustainable development (JICA, 2013; Lin et al, 2018; "Island Administrators", 2019; Lynch, 2019; Speakman, 2019; Zickos, 2019). Based upon interviews with state government agency personnel in Pohnpei, the car in Figure 2 is just one of an estimated 1,000 or more such vehicles on the island, with many more similarly disintegrating across other islands of the FSM. When compared with a 2013 report that estimated there to be less than 1,000 end-of-life vehicles distributed across the whole country (JICA, 2013), it can be considered that the number of abandoned cars has risen quickly in the FSM.

Cars are abandoned in Pohnpei when they can no longer be repaired, either because specific parts are unavailable (which is often the case) or because owners lack the financial resources

<sup>1</sup> Adapted from Wikipedia Commons 'Micronesia on the Globe': <https://commons.wikimedia.org/w/index.php?curid=15176204>) and CartoGIS Services, College of Asia and the Pacific, The Australian National University: <https://asiapacific.anu.edu.au/maponline/base-maps/federated-states-micronesia-o>

to pay for repairs, with many cars left at repair shops indefinitely. The need for repair is considered in part to be driven by poor road conditions causing vehicular damage (Ur, 2015), and is compounded by the fact that so many of the cars in Pohnpei (and across the FSM) are purchased as cheaper, imported used cars, resulting in the need for repair sooner than may otherwise be required with new vehicles.



Figure 2 - A decaying car by the roadside strikes a discordant note in the tropical landscape of Pohnpei. (Photo: Iain Hall, 2019)

The car at the forefront of Figure 3 is one such imported used car. It is possible to assume this because the car is right hand-drive, configured to be driven on the left side of the road, while in the FSM cars are driven on the right side of the road. In fact, the majority of cars in the FSM are imported second-hand, a reflection of the economy and limited disposable household incomes across the country. Pohnpei State has the highest average annual household income of all four states at just \$22,293, with income from wages and salaries averaging \$13,029 (FSM Office of Statistics, Budget, Overseas Development Assistance and Compact Management, 2014). This compares with a national average household income of \$16,950, with income from wages and salaries averaging \$11,386 (FSM Office of Statistics, Budget, Overseas Development Assistance and Compact Management, 2014). It is of note that the car in Figure 3, like the trucks in Figure 4, is a Japanese-made Toyota, which are commonplace in Pohnpei. Japan represents the single largest source of cars for the FSM, comprising 86% of all imports in 2017 (OECD, nd). Owing to the higher levels of emissions from used cars compared with new vehicles, the FSM government has raised specific concerns in the past about the country being the recipient of Japanese ‘junk’ cars that do not meet appropriate US emissions standards (FSM, 2004). With the value of car imports into Pohnpei having risen from \$2.4 million in 2008 to \$4.3 million in 2017 (despite a government target of reducing vehicle ownership by 10% by 2010), the potential for such problems is only growing (FSM, 2004; FSM Division of Statistics, 2018).



Figure 3 - An influx of used cars brings with them the potential for sub-standard emission levels. (Photo: Iain Hall, 2019)



Figure 4. Like these trucks, the majority of cars imported to the FSM originate in Japan. (Photo: Iain Hall, 2019)

The abandoned cars of Pohnpei are just one facet of the broader waste disposal conundrum that many government and non-government personnel consider to be the single greatest environmental problem facing the island. Some collection of end-of-life vehicles has



occurred, as any who pass through Pohnpei International Airport will be able to see; Figure 5 shows a wall of cars lying parallel to the causeway that joins the airport to the main island. That this not insignificant collection of vehicles is being so entirely subsumed by vegetation highlights the fact that they have been there for some time. This re-enforces the need for a solution that goes beyond simple collection. The question then becomes what to do with these vehicles? Disposal of solid waste is a perennial issue for many islands, and in the case of Pohnpei there aren't great enough quantities of large solid waste items such as old appliances, recyclables and vehicles, for full-scale waste management facilities to be an economically viable option on the island itself. The alternative is the transportation of waste for processing elsewhere, but this is expensive and is limited by a lack of suitable recipients. Government agencies are working on developing agreements with overseas partners to export different types of waste and recyclables, with aluminium cans collected and shipped to Korea for recycling. In the past some scrap metal from vehicles has been exported to China (EPA, 2014), but hopes for an ongoing partnership between the FSM and China to deal with junk vehicles were dashed when the latter introduced a ban on the import of scrap metal and crushed car parts in 2018 (General Administration of Customs, PRC, 2018).



Figure 5 - A wall of scrapped vehicles under a blanket of vegetation parallels the causeway that carries travellers between Pohnpei International Airport and the main island. (Photo: Iain Hall, 2019)

The issue of cost is amplified by the federated nature of the country; management of waste is a state-level issue, rather than a national issue. Funding for waste management must therefore come directly from the Pohnpei State government's operating budgets, which are small. Revenues for the Pohnpei State government in 2016 were a mere \$31.6 million (FSM

Office of Budget & Economic Management, 2018). The national Strategic Development Plan 2004–2023 lays out plans to better deal with this issue of funding, proposing a vehicle disposal tax to enable the collection and recycling of cars.

Beyond the issue of waste, these cars present a number of environmental problems. Importantly, abandoned vehicles are a public health problem. They are a physical hazard, particularly to children, who play in or on them. The vehicles also pose a pollution risk as remaining oil, brake fluids and other chemicals that have not been removed can leak into the surrounding environment as they rust and decay. There are concerns that these vehicles become habitats for vermin and insect pests, particularly mosquitoes (JICA, 2013), an issue that is recognised in other places where abandoned vehicles are prevalent (Lynch, 2019). Disrupting the natural environment as they do also provides an opportunity for invasive plants to gain a foothold, as can be seen in Figure 6, where a small truck has been subsumed by the ‘mile-a-minute’ vine *Merremia peltata*.



Figure 6 - Invasive plants are quick to engulf abandoned vehicles, like this small van.  
(Photo: Iain Hall, 2019)

Perhaps the most obvious environmental issue that abandoned vehicles present in the FSM, however, is one of visual pollution; a long-forgotten car slowly decaying disrupts the natural beauty of a tropical island that is everywhere erupting with lush vegetation and alive with the sounds and smells of abundant nature. The visual appearance of such vehicles is, of course, a subjective matter. A photographic collection entitled ‘Abandoned Wrecks’ showcases a variety of striking images of disused vehicles of various types from around the world (McNab, 2017). Some of these are considered to be beautiful sights (Mafi, 2017), and many, including a space shuttle and the *Titanic*, are undoubtedly of high historical

importance. These vehicles can be said to be contextually very different from those that abound on Pohnpei and other small islands. While numerous historically valuable military vehicles and ships are to be found throughout the FSM, the abandoned cars littering the roads of Pohnpei currently hold no particular historical or cultural value (though it is possible that this may change with time). Rather, in the current context of an island facing multiple sustainability challenges they are primarily a nuisance rather than an asset.

Any such discussion of the aesthetics of abandoned cars is neither trivial nor merely intellectual in the context of Pohnpei. With less than 4,000 tourists and visitors to Pohnpei in 2016 (FSM Division of Statistics, 2016), expansion of the tourism industry lies at the heart of the state and national strategic development plans for future sustainable economic growth (Pohnpei State Government, 2013; FSM, 2004). These plans for economic development are essential for the FSM. A small country totalling only 702 km<sup>2</sup> of land within vast territorial waters (CIA, n.d.), the FSM is one of 38 so-called small island developing states. These countries share a number of attributes such as limited resources, small domestic markets, dependence upon a small number of external markets, low levels of irregular international traffic and a fragile environment (UN-ORHLLS, 2019). The economy of the FSM is small, with government revenues for 2016 a little over \$210 million, and the national average household income just under \$17,000 (FSM Office of Budget & Economic Management, 2017; FSM Office of Statistics, Budget, Overseas Development Assistance and Compact Management, 2014). For more than 30 years since achieving independence, a large part of the country's economy has relied upon funds from the USA delivered via the Compact of Free Association, which provides significant financial assistance to encourage economic development and growth. Economic growth in the FSM has, however, been slow and funds received through the Compact of Free Association remain a significant revenue source. The limitations of the FSM's economic growth to date are both a driving force for future development that includes tourism and are also a powerful factor in the presence of so many abandoned cars across Pohnpei. This surfeit of junk vehicles is not, however, in keeping with the intent for a sustainable future and may hinder future tourism, abruptly dispelling the concept of a remote paradise island that future visitors are likely to have before they arrive.

Different islands are adopting different strategies to deal with the challenge of abandoned cars in their own contexts. In the case of the Torres Strait Islands, this involves government grants estimated to be in excess of AU \$16 million to pay for their removal and, in some cases, deep burial (Lynch, 2019). On the Big Island, Hawai'i, a US \$12 fee attached to vehicle registrations is being used to fund a year-long program of no-cost collection of up to two cars per resident. On Kauai, Hawai'i, planned legislation will extend the beautification fee attached to vehicle registration to rental vehicles thereby helping support the collection and handling of abandoned vehicles (Speakman, 2019; Zickos, 2019). In the US Virgin Islands, owners of abandoned vehicles can be fined more than US \$1,000 if they fail to remove them, as a way of deterring the abandoning of vehicles in the first instance (Source Staff, 2019).

The need to deal with abandoned vehicles is clearly recognised in the FSM and Pohnpei. The Strategic Development Plan 2004–2023, alongside the FSM's initial National Biodiversity Strategy and Action Plan produced in response to the United Nations Convention on Biological Diversity, set the target of removing abandoned vehicles from all public areas by 2008. This target was not met. In the Pohnpei State Biodiversity Strategy and Action Plan 2018–2023, a further target of vehicle removal by 2019 was included (Pohnpei State Department of Resources & Development, 2018). Appropriate legislation is

in place to support this latter target; the Pohnpei Environmental Protection Agency has legal recourse to remove all abandoned vehicles under a state law that also intends to

*preserve the pristine beauty of our natural environment and to protect, maintain and improve the aesthetic attributes of our State for the promotion of public health and welfare of our people and for the enhancement of recreational and tourist facilities, as well as for agricultural and other legitimate beneficial uses* (Pohnpei Legislature, 2006).

As clear as this law is, there are additional challenges in Pohnpei State that have prevented it from being enforced, and that make approaches such as those adopted elsewhere unlikely to be feasible. Not least of these is the fact that most land in Pohnpei is privately owned. This means that the vast majority of abandoned vehicles, even those alongside the main roads, are situated on private property, making the process of dealing with such vehicles significantly burdensome and beyond the current capabilities of enforcement agencies. Furthermore, Pohnpei State does not have the resources (or at least has not prioritised the resources that it does have) to collect these vehicles and bring them to a single dump site, and individual owners are often unable or unwilling to shoulder this cost. The 2019 state target therefore remains unfulfilled.

Beyond policy targets and legislation there have been investigations into alternative routes for addressing the growing numbers of end-of-life vehicles across the FSM, including raising public awareness of the issue and developing a public transport system (Ur, 2015), the latter being unsustainable with small government budgets. A 2013 report by the Japan International Cooperation Agency (JICA) examining the feasibility of establishing a commercialised recycling business in various countries across the Micronesia region considered it unlikely to be worthwhile in the FSM owing to, amongst other things, a lack of accurate statistics on vehicle numbers and the high transportation costs associated with the dispersed nature of the vehicles in question (JICA, 2013).

There are currently, therefore, no obvious solutions to the abandoned cars of Pohnpei and the various challenges they pose. Their presence continues to highlight the numerous economic and environmental challenges that Pohnpei, the FSM as a whole and many small islands around the world face. Challenges that include an economy in development, limited waste management, environmental disruption and pollutions, and limited capacity for policy and legislative enforcement. The abandoned cars of Pohnpei are a very visible lens through which to consider these issues, and until a way can be found to deal with them, they will continue to be woven into the tropical island landscape, serving as a reminder of the ongoing need for island sustainability.

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