

Transportation Lessons for Honolulu from Athens 2004 Summer Olympic Games¹

Four major transportation infrastructure projects were constructed for the Athens 2004 Olympics. All four were initiated, designed and completed roughly between 1996 and mid-2004. All costs are for construction; they do not include design (~+10%) and land acquisition costs (vary widely).

1. *Attiki Odos* or Attica Tollway **toll freeway** (~1.3 billion euro; **50/50 public/private**.)
2. **Grade separations** along major arterials and Intelligent Transportation Systems including Siemens' advanced traffic signal controls and a traffic surveillance/security center (~0.3 billion euro; all public funds.)
3. **Suburban railway**, with fancy rail cars on track in the median of Attica Tollway, which explains the low cost since the right-of-way was ready and prepared for the installation of rail tracks and stations. (~0.5 billion euro; all public funds; same for tramway below.)
4. At grade **tramway** on existing roadways, with rail cars on steel rails (~0.4 billion euro.)

OUTCOMES

1. Attica Tollway is spectacularly successful and has exceeded its financing break-even point. Despite the high volume of traffic, during peaks the metering of traffic at the tolled ramps provides mostly free flow service (70 mph) on its 45 miles (90 miles if each direction is measured separately). End-to-end travel time was cut down from 2.5 hours to 30 minutes.
2. Underpasses and signal progression reduced stop-and-go traffic on major arterials. Emergency response and express bus service is faster. State-of-the-art traffic adaptive signal system runs mostly on 90 second cycle, is well coordinated and fully supervised.
3. *Proastiakos* or suburban railway is called Europe's most expensive limo service. On average, the 300 seat trains carry 16 passengers per trip (every 15 minutes). Hardly anyone uses it to/from the airport. Too humbug to lug the suitcases in terminals and trains. Three people together can beat the fare by taking a taxi. Of course, Athens politicians say that the abysmal performance is because "the 20 mile route is not long enough." They want to sink another billion and promise that it'll work!
4. Although it runs for about 10 miles continuously through density higher than Waikiki's, and connects the city's center to beaches at its far end, the Tramway is never crowded, and has not reached even one half of its ridership forecast. It continuously disturbs the coordination of traffic lights and blocks intersections. Adjacent neighbors protest its steel-wheel-on-steel-rail noise and vibration; some took chairs and sat on the rails blocking it for hours. The City promised to "polish" the rails!

Notably, all these happened in a city with:

- ❖ A much greater population count and population density than Honolulu, where rail has a much better chance to work.
- ❖ A similar multi-job and large family socio-demographic environment.
- ❖ A similar average income (actually, lower income, but lower taxes and cost of living.)
- ❖ A much lower automobile ownership.

The bulk of people transportation in Athens is served by public bus (diesel, LPG and electric trolley). Athens has a fleet of nearly 10,000 buses. They are generally heavily utilized. Bus, taxi and car are the only modes that can reach neighborhoods and serve the many who are auto-less in Athens (several because they don't have any place to park a car.)

Athenians pay about \$5 per gallon of gas and an 1.4 liter Toyota Corolla costs approximately \$20,000. Yet they prefer to pay the 2.5 euro toll (about \$3) and leave the trains empty. The Suburban Railway is in the median of Attica Tollway. On a busy weekday, the tollway carries over 240,000 vehicles and over 400,000 people (the average occupancy in Athens is about 2.5 persons per vehicle) and the railway carries under 30,000.

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