

Aviation's Effectiveness

The AER evaluated the effectiveness of aviation at advancing people's work, relative to surface transport, in the five basic [transportation contexts](#) found around the world: the road, river, ocean, trail, and no-mode contexts. The project used missionary aviation's [functions and sub-functions](#) as a practical framework.

Watch the video on this page to learn how to read the graphs, and use the document links to see material explaining the findings. View the research findings by using the drop down options below.

[Function and Sub-Function Definitions](#)

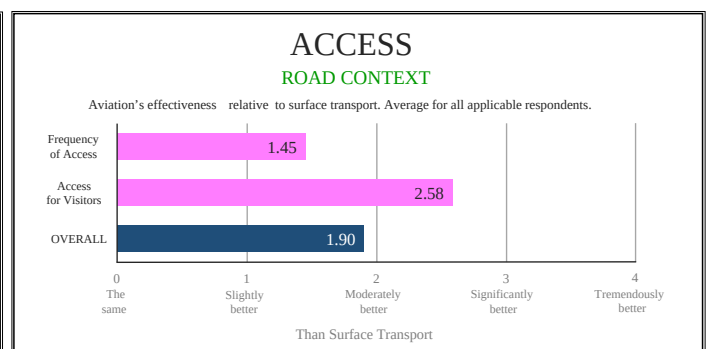
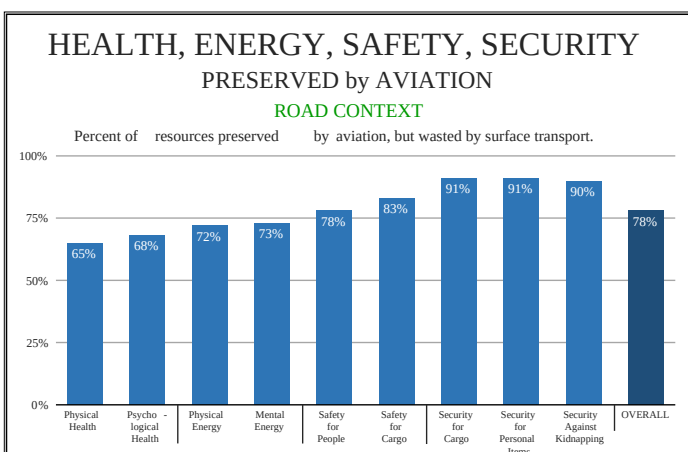
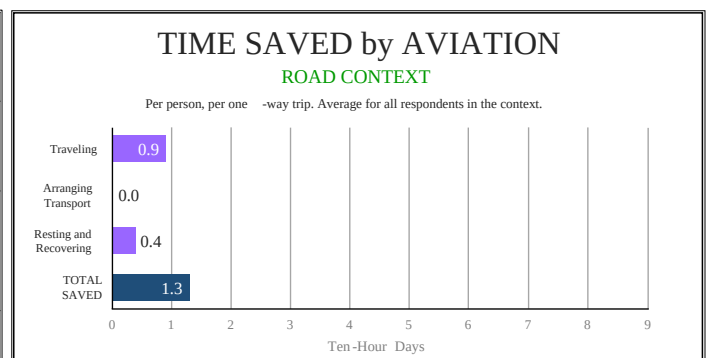
[Types of Findings](#)

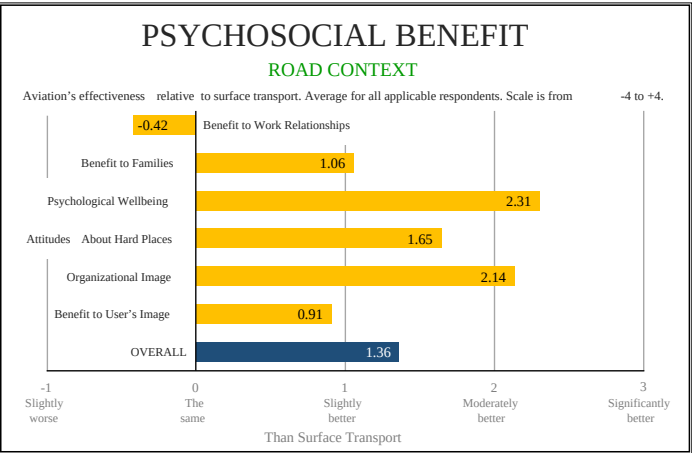
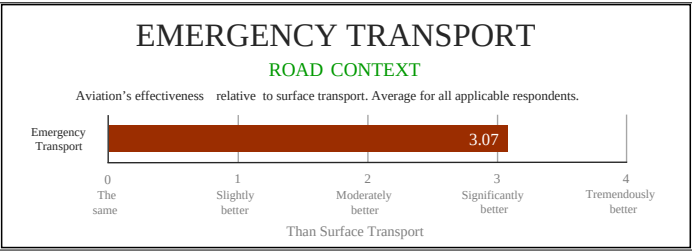
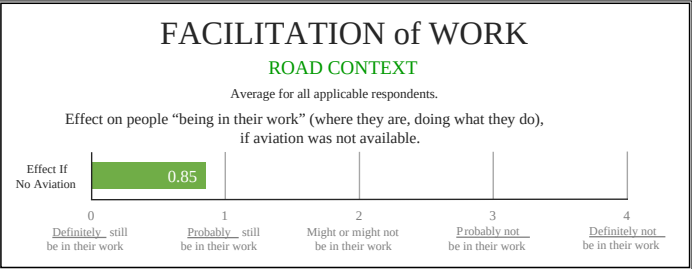
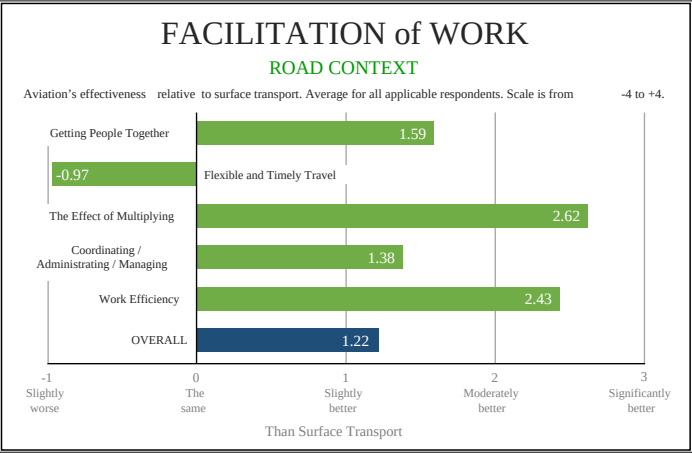
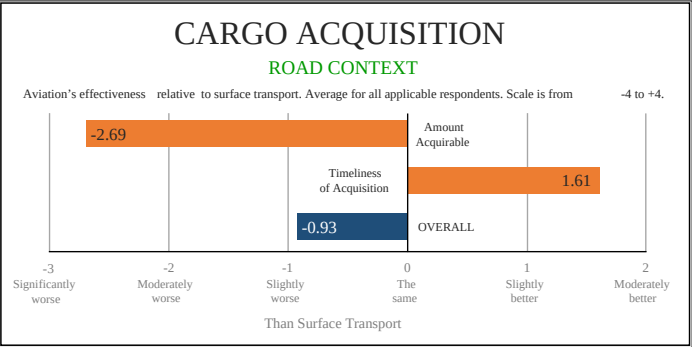
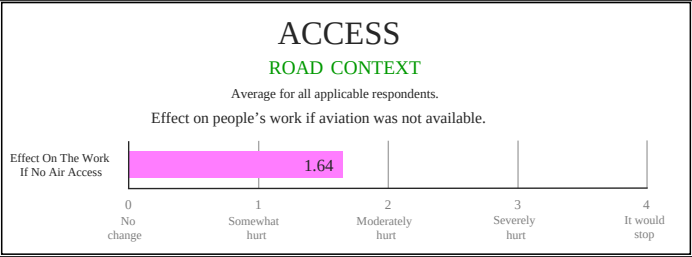
[Resources Preserved Graphs](#)

[Work Advancement Graphs](#)

Aviation's Effectiveness By Transportation Context - Road

AVIATION'S EFFECTIVENESS			
ROAD Transportation Context			
TIME SAVED	Traveling	0.9 (9 hrs)	1.3 ten -hour days saved (per person, per 1 -way trip)
	Arranging Transport	0.0 (none)	
	Resting & Recovering	0.4 (4 hrs)	
HEALTH, ENERGY, SAFETY, and SECURITY PRESERVED	Health Preserved	66%	78% of resources preserved
	Energy Preserved	73%	
	Safety Preserved	81%	
	Security Preserved	91%	
WORK ADVANCEMENT	Access	1.80	1.24 out of 4.0
	Cargo Acquisition	-0.93	
	Facilitation of Work	1.14	
	Emergency Transport	3.07	
	Psychosocial Benefit	1.36	





Respondent Statements

Time

With aviation, I'm at work sooner than I would be by surface. That saves me 2 days out of a 2-week visit. In those 2 days, I can see an extra 10 to 15 patients in the clinic and operate on 7 to 10 more than if I took surface.

Flying out saves me time, and I can use that time to serve others.

The plane gets you there faster and doesn't waste as much time from your ministry.

With air, we could start straight away. We'd be up and running.

In the last year, if we would have had the helicopter, I could have saved 6 weeks' time.

Health

If I'm taking three, seven, even fifteen kids, I'm choosing the plane rather than the vehicle. The more children means the more girls who have to use the squatty-potty and in this country, some facilities can be more harmful to your health than using a bush.

If someone was absolutely scared to death to drive, they can fly. There is a German man who will not go by surface. We have all these terrorist wannabe's.

While he's driving, I'm looking for donkeys and kids, and am stressed. In the airplane, once we're off the ground, I'm good.

I made a 30-second video of driving on the roads here, and for the first time, people understood why I fly.

Energy

There is something about being up there and seeing God's creation - the trip renews me.

I would sleep better in an airplane than in a bus, so I'd be better mentally when I arrived.

We landed, opened our things, and started because we had the energy.

When I go by land, I'm exhausted when I arrive; I can put in more energy if I travel by air.

The road trip is so exhausting that we don't want to do it. Air is significantly-less exhausting, less stressful, and so much easier and faster to do.

Air is not as taxing, it's quicker, more efficient. You have higher energy levels when you get there, and less recovery time than if you came by car.

I used to go everywhere by road. Now, I fly everywhere and I'm not wiped out by the traveling.

Safety

We live in a mountainous area and have laterite soil, which packs into the tire treads and makes them slick. You're looking out one side of your vehicle, down a mountain and it's stressful. So we got rid of the vehicle and went to aviation.

With air, you take out the factors of banditry and blowouts (tires blowing out and causing you to roll over).

Security

On a trip this long, someone is waiting for an opportunity to rob you. By air, the opportunity isn't there.

It's the road trip to and from the airport that's the problem, not the flight.

No chance of getting kidnapped because it's our plane, our people, and there wouldn't be any pirates to take over the plane.

With air, there's no possibility of having to face rioting or the police.

With the militant group in that region, you'd rather fly over that area than drive through it.

In times of tension, we are the low-hanging fruit as Westerners.

(As an unaccompanied female) I can travel independently by plane, but not by road.

With ground transport, white people in a black culture stand out. They are safer taking the plane because they don't stand out.

Aviation could be a crucial factor. In smaller communities, being able to get out by plane could make the difference between life or death.

Aviation gets missionaries off the road. Carjacking is such a big thing in our world; there have been lots of carjackings.

We're thankful we have a plane allocation; we hear of someone getting held up on the road about every 2 weeks.

Access

Air travel saves a tremendous amount of time. It reduces the length of time away from home, which enables me to make more trips.

Surface, because the places I have to work are close by, are reachable by road, and some don't have airstrips.

Some small villages I visit are only accessible by aviation; as an unaccompanied female, it's not safe to travel by road.

The visitors couldn't do this trip without a plane.
For someone who doesn't know the language, doesn't know how to drive, how to deal with the obstacles, it's 3,000% easier to put that type of person in the plane.
Visitors can access our work locations only by air.
Air is better, because of the type of visitors we have, they don't have language abilities. Air is less shocking for them.
If I couldn't fly, my work would be slowed down; it would take longer.
Without aviation, we'd be restricted to the capital.
With no air service, my work would be limited in that we could not expand.
Air is better because we don't have to get a military escort and be constrained by having security people with us all the time.
I refuse to make this trip by road because of the time it takes, the energy it takes, the safety and security. If there are no funds in the budget to fly, I cancel the trip.
Aviation's helped take people into places you can't access by road for security reasons.
Cargo
It depends on the size, because the airplane is limited. If it's a box of medicines, or a small amount, air. If it's something big, by surface.
If I need something specialized, like a tool, air is better because it can be there by tomorrow. Otherwise, it'll take 2 or 3 days for it to get there.
Money aside - air, hands down. If we needed an urgent medicine, it'd take at least 2 days by ground.
Buses come every day; with aviation, you have to call and check their schedule.
When the planes were flying, easier by air - until the subsidy stopped. There were many more opportunities to get things and it was easier than by surface.
When fresh supplies come, it's like Christmas. When we didn't have aviation, the kids were counting apples to make them last.
Facilitation of Work

People in the village see the helicopter and they come out. Because they come out, we can give them a health screening. When we go by land, only the sick people come to us.

Air is better, because it facilitates getting together without being exhausted, and it saves time.

The air helps me to be in places so I can spend quality time with people.

Air, because you have more time with the people, you're less tired, and we can start working sooner.

Surface, because I can drive after dark and am not limited by the sunlight, the storms, the dust, or the desert storms like an airplane is.

If I need to go earlier or if the plan's changed, I can just call them (the aviation guys). The bus doesn't wait.

When I travel by surface, it means a 2-day trip and it's draining - which adds a third day (to rest and recover). If I can get there in a few hours' time, it gives me extra days in the year to work.

I recently was able to survey two locations in a couple hours, whereas it would have taken me 5 days to do it by land.

Air enables me to be in multiple locations on one trip. Whereas, it'd take me twice as long if I drove.

Aviation helps me avoid burnout. You never know what will happen when going by road. Aviation reduces a lot of stress, and stress adds to burnout.

Aviation allows me to be here longer term, 10-15-20 years rather than shorter term, because taking the bus and public transport is stressful.

Aviation would enable me to stay in the work longer in years because I'd have less cumulative fatigue.

I think if air service weren't available, we'd probably retire.

Our deputy director just left due to burnout; he was open about that. Maybe more trips by air would spare some of these guys.

It's hard to know where I'd be physically without the flights. I really appreciate being able to take them.

Aviation allows a greater variety of people to be involved in mission work.

We would have left the field a lot sooner without aviation.

With aviation, we're safer, which makes it easier to stay in this country.

Before the militants were there, we didn't have to depend on aviation as much as we do now.

Aviation is better because it saves me time, energy, is safer, and more secure.

Traveling by air takes less time and energy so I can spend more time and energy on my work.

Air, because there's less time traveling, less time spent recovering from travel, and I can get back to work quicker.

By air, I have the opportunity to impact other ministries because I can travel efficiently.

It's about efficiency - that's a big part of the reason we fly; your energy is worth something.

Aviation gets me to more places in a shorter amount of time and I still have energy left. And, it mitigates the risk. The greatest risk of being on the road is an accident.

Air, in all ways, changes the efficiency of the work.

Energy is more efficient on the plane; you're refreshed instead of exhausted.

I can do more using air, because I waste less time traveling.

In our context here, because of the lack of infrastructure, different crises happening, the corruption on the roads and at the borders, aviation is necessary.

The aviation service has been extremely useful and helpful; it has enabled us to do our work and this has been true for decades.

Aviation would advance the work of people in really-remote places. Use aviation if you're really going to go deep.

Without aviation, the work wouldn't have gotten started.

Aviation is one of the things that unifies all the missions and the churches. There's the boarding school, the hospital, and the flight program. Aviation helps complete the gifts of ministry.

Emergency Transport

Aviation is always ready at the slightest moment.

In our past, the flight program saved our daughter's life.

Psychosocial Benefit

You think of the health of the organization. With aviation, people feel real relationships with their supervisors. Your church planters, out there at lower levels, if they're not in healthy, accountable relationships, if leaders are not able to get to them, that has a trickle-down effect on their work.

I flew out to attend the funeral of a church leader. And although it was just go out and turn around and come back, it was very meaningful to the people. They have a saying, "Where the heart is, the feet go."

If I go by bus, I might arrive late due to an accident or traffic jam, and that would destroy the relationship. By air, I arrive on time and the meetings happen on time, and the relationships are maintained.

I like to be with my family. If there was no aviation, it would be difficult to be together as a family in a healthy way.

Aviation makes it possible for me to do the work and be with my family.

With three children and no access to aviation in case of emergency, my family wouldn't be here with me.

A long road trip is really hard on children. By air, it's more comfortable, more convenient, and there's less chance of accidents.

For those taking many trips per year, aviation's a time saver. And because of the policy that you can only be away from your wife for so many days a year. If you save a day here, 2 days there, it adds up.

By air, I can get back to my family quicker, especially in case of an emergency.

Air is better, even if not traveling as a family. We have one child that struggles with separation and sleep issues. My husband is able to travel much-more quickly by plane and this reduces the trauma at home.

To have our daughter here from school for fall break, it's 12 days of travel to have her home for 3 days. This is why we put money in the budget for two flights for her.

The more kids you have, the more you should fly. Each additional child is an additional reason to fly.

Traveling here is so long, it's really hard work, sometimes the roads are bad, and there's the heat. And traveling with children makes it more complicated.

Our daughter gets carsick, and it's 20 minutes by helicopter versus 2 1/2 hours by road, taking medicine, and getting drugged up for the rest of the day.

The work of driving all the way, the planning involved to do all of that, I gotta stop five, six, eight times to speak to security personnel, go over seventy speed bumps, plan for food and fuel, all the stress of travel in a Third World country. I'm responsible for all of that versus I'm along for the ride when I fly.

I feel like aviation takes a lot of the stress out of the trip. You don't have to eat street meat, change flat tires, or have buses barreling at you at 120 kph (75 mph).

Aviation helps keep people sane, which allows people to do a better job.

One of the things you face is feeling isolated and alone. The plane cuts that down. An encouragement, a hope, comes out of that.

When I'm at the end of my rope, I don't go on the bus. No matter what, I go by air.

If I have to travel a distance, then the plane is better. There's no hassle at the border, no police checks, no overheating, or flat tires.

You can be evacuated if the rebels come.

With aviation, people wouldn't be in the middle of the war.

If you're flying, you don't have to worry about being kidnapped or killed.

If you fly, it's such a different experience. You don't think about "what if this happens or what if that happens." Those fears escalate, especially after the sun goes down.

Traveling takes a toll, with police stops, wondering if you're going to get pulled over and how you'll handle that, dealing with crazy drivers, the constant stress, always having to be alert on the road. Whereas, you can fly over all of this.

Having aviation as a possibility, an option, and available, makes my presence here more sustainable, that is, it sustains my morale, not my physically being here.

In terms of security, if I had to get out of here, it's reassuring there are flights. If our town was attacked, and I could get myself to the airport, I could get out without having to drive through a bad part of the country. And that affects your attitude because you have that reassurance.

When my wife's attitude is better, my attitude is better. So if air is better for her, I'm all about it.

Aviation affects it positively, because it's a sign of efficiency, a sign of security, it portrays the seriousness of the mission (task). People think, "If it involves planes, its mission is very important."

For our missionaries and for the nationals, our use of aviation gives a sense that the work is urgent and important.

Aviation is seen as not something used because you have money, but because of the type of job you do, the importance of the work. Aviation is not just for fun, it's to have something serious done, and quickly, too.

Oh my goodness. Aviation is such a blessing to our partners. The service of all the aviation department workers makes our organization look good. It shows our organization has a servant heart and is willing to share this valuable resource.

Aviation adds an air of professionalism, that we're not a redneck organization; not everyone has aviation.

The aviation guys are a good source of good will. Those guys interact with the government, the military, and the police, and probably bring more good will than we know.

To our partners, to government officials, using aviation gives the sense of being a quality organization, of prestige; you're seen as having the capacity of knowing what to do.

A positive effect, because of aviation, we can make more impact. It helps us to deliver and to make a positive impact on the work. If you go by road and break down or are exhausted, it's hard to make a contribution.

The ability to fly lends a certain credibility to me. What would it look like if I came in after 4 days in the truck, all dusty and dirty?

They see that such an effort that's being put in to bring them the gospel message, "it wonders them" that I'd come to them in this type of machine.

In a high-contact society like the one here, having the infrastructure of aviation associated with our work adds to my credibility.

Ours was the first flight into that town in 3 years. We received the royal treatment and had good contact with local officials, which was important given the persecution going on there. It wouldn't have had the same effect if we'd arrived by road.