



Riders for Health – A Fleet Leasing Model in the Gambia

A Case Study



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EXECUTIVE SUMMARY

For millions of people across Africa, health interventions such as vaccines, HIV counseling and treatment and other public health expertise are out of reach. The barriers to health care can include: shortage of health personnel, shortage of medicines, distance to a health center, terrain, poverty and lack of transportation.

Well-maintained vehicles and motorcycles are often a crucial missing link in the health delivery supply chain. Although experts advocate for transport to be the third largest resource requirement for a ministry of health after personnel and drugs, it is frequently a neglected component in the health budgeting process. Inappropriate and overly expensive vehicles are often procured, and then not effectively maintained. As a result, transportation resources and assets are not conserved or optimized. Fleets can have short, unpredictable life-cycles and suffer large amounts of downtime.

This case study examines the evolution of a comprehensive vehicle management model designed by the social enterprise Riders for Health (Riders) to provide African ministries of health with consistently reliable and cost-effective vehicle fleets for national-scale health care delivery. The model, called Transport Asset Management, or TAM, has been implemented through a public-private partnership¹ between Riders and the Gambian Ministry of Health. When the national vehicle fleet is fully rolled out, the Gambia will become the first African country to have sufficient health care delivery vehicles to service its population given the structure of its health system.

Currently unique to the Gambia, the emergence of the TAM program presents other ministries of health across Africa with an opportunity to fully outsource the management of health care vehicle fleets.

About Riders for Health

Riders for Health (Riders) is a non-profit organization that manages vehicles and motorcycles used to deliver health care and other services vital to rural communities in Africa. Riders manages vehicle fleets on a planned, preventive maintenance basis so that they are consistently reliable. The organization's humanitarian focus is the enabling of effective health care delivery and health worker outreach. As a not-for-profit social enterprise, Riders operates using a cost-recovery model, charging a fee to governments and health care agencies so that its programs become sustainable and can therefore provide a long-term service to its partners.

Riders was founded within the world of professional motorcycle racing in 1989 by Andrea Coleman, Barry Coleman and motorcycle racer Randy Mamola. Andrea and Barry now lead the organization, while Randy continues to advocate for it in the motorcycle racing community. Riders currently operates in seven African countries, employs over 300 local staff, and provides direct support of ministries of health and other health care agencies.

To trace the testing and development of TAM to the point of its rollout in 2009, this case study follows Riders' work in the Gambia which began at the time of the organization's conception in 1989. The study reviews the various operating models that Riders tested in the Gambia and elsewhere, pulls in the perspectives of key stakeholders, describes the elements involved in putting the model in place and financing it, and also explores the diffusion potential of the TAM model as Riders looks to expand it into other countries.

The cornerstone of Riders' fleet management is the technique of running vehicles and motorcycles on a consistent 'zero breakdown' basis. Riders describes this component as

“preventive maintenance”, a system involving three key elements. First, training is conducted on many fronts. Riders trains health workers to ride motorcycles, trains drivers to operate vehicles, teaches health workers to conduct daily motorcycle maintenance checks, and trains technicians in skilled transport maintenance. Second, vehicles receive regularly scheduled maintenance checks and certain parts are replaced before they fail. Third, the maintenance is performed on an outreach basis; vehicles and motorcycles are regularly serviced where they are based instead of being taken to a central location, meaning that minimal off-road time is necessary. The goal of this system is to operate fleets at the lowest possible cost for the longest possible time, even in difficult conditions.

Transport Asset Management (TAM)

TAM is a leasing model that incorporates financing and conservation of vehicles, using the fleet management techniques described above. By entering into a TAM contract with Riders, ministries can spread fleet purchase and running costs over a number of years. As part of the TAM contract, assets will be replaced at an economically optimal point, which can provide a reliable fleet for the long term. Other economic benefits include the fact that TAM enables streamlined fleet management. Riders can purchase a standard set of vehicles at one time meaning that a standardized fleet is operated, reducing the overall supply chain complexity.

After a series of negotiations that involved educating ministry staff about the contract structure and payment scheme for TAM, Riders implemented the model in the Gambia in 2009. With TAM, Riders owns and leases out a mixed fleet of motorized vehicles, including ambulances, health outreach ‘trekking’ vehicles and motorcycles, to the Ministry of Health, and in conjunction, offers its preventive maintenance system. The financing of the TAM fleet in the Gambia involved a pioneering arrangement between Riders, Africa-based GT Bank, the US-based Skoll Foundation, and the Gambian Ministry of Health. Because the TAM fees Riders charges the government include a fleet replenishment component, by the time Riders purchases a third generation of the fleet for the Ministry in about ten years, it should be able to purchase it without using bank financing. This will simplify the arrangement for both Riders and the Ministry, and will ultimately eliminate bank interest rates from the fees charged to the Ministry.

The future of TAM

In addition to keeping TAM operational indefinitely in the Gambia, Riders’ goal is to replicate it in new African territories over the coming years. However, implementing in a new country may be met with several challenges and other parties will need to engage to make wider replication a reality.

The first and largest challenge to replicating TAM is likely to be in securing the necessary levels of funding or financing to purchase a fleet and pay for setup and infrastructure costs. Funding a sustainable outsourced leasing model such as this is a different way for global health funders to allocate grants to governments.

A second challenge linked to the first is that TAM involves a long-term contractual commitment from the government. Governments may at first perceive TAM as involving a higher degree of risk than existing methods of requesting one-time vehicle donations and finding a way to fund maintenance annually on an ad-hoc basis. While governments may outsource some non-core functions such as airport and sea-port management through public-private-partnerships, it is not

yet common practice to outsource in the health sector in Africa. However, given that health transport management is a non-core government function, the case can be made to outsource to Riders as a humanitarian-driven organization with transport management expertise. Indeed the Gambia is a country where few services are outsourced – even to large corporate entities – and it is therefore notable that Riders successfully secured a national contract.

Third, while TAM's introduction in the Gambia benefited from Riders' long-standing reputation and track-record working with the ministry of health, in a new territory, Riders must engage a larger network of parties to encourage the ministry to approve TAM. Fourth, as is the case with any managed system, those who benefit from unregulated use of vehicles may be reluctant to approve TAM since it restricts personal use. Fifth, additional evidence should be developed supporting existing data on cost-effectiveness of the Riders system in comparison to unmanaged systems.

Given the strong satisfaction that the Gambian government and citizens have felt with Riders' services, and given that Riders' TAM model is designed to be replicable at any size, it would seem that the opportunity for implementing TAM in other countries is strong. Once African ministries of health acknowledge that existing vehicle management systems do not consistently deliver strong performance, donor partners could collectively advocate for TAM and, in lieu of donating physical vehicles, they could contribute to one pot of funding within the ministry's annual budget to cover Riders' monthly cost-per-kilometer (cpk) charge. A second and related opportunity is that the government can piece together the various health budget components that already fund transport. Finally, the financing mechanism for a TAM fleet in another country could be modeled on the Gambian example.

If government approval, financing partners and funders of an ongoing cpk charge can be secured, Riders is poised to expand high-quality health transport management, and in turn, increase the equity and volume of health interventions delivered in Africa in the future.

1. INTRODUCTION

When Ali Ceesay began maintaining health vehicles as a volunteer for the Gambia Ministry of Health in 1981, he did not imagine that his work would one day help to spark an idea that is raising the bar for health transport maintenance in several African countries. In 1989, Barry and Andrea Coleman, now co-founders of Riders for Health, were involved with the non-profit organization Save the Children Fund (SCF) when they were invited to visit the Gambia to provide some consulting on the management of its motorcycle fleet used by health workers. Barry Coleman made this first visit to the country and during his time there saw that Ceesay, without having the benefit of tools or formal expertise, was performing preventative maintenance that was keeping health workers' motorcycles running in the Gambia's easternmost province while motorcycles in other regions were inoperable. After seeing what a little regular maintenance work could do in the Gambia, Coleman formulated the concept for what is now Riders for Health's preventive maintenance system. Today, Riders is led by its founders Barry and Andrea Coleman - executive director and chief executive officer respectively. The organization has a turnover of over \$5.5m (£3m) and provides vehicle management services for mobilized health care workers in the Gambia, Zimbabwe, Lesotho and Nigeria, and also provides support services for vehicle systems in Kenya, Zambia and for one community-based organization in Tanzania.² Riders-managed vehicles allow health workers to provide health care access to over 10.8 million Africans.³ Marking a new chapter in its evolution, Riders' leasing model called Transport Asset Management (TAM) enables the Gambian government to lease an entire fleet of health vehicles, ambulances, and motorcycles. This new fleet has made the Gambia the first country in Africa that is capable of delivering health care for its entire population.⁴



Since the 1990s, Riders has used a number of operating models in the Gambia. In a country where few government services are outsourced, health transport management has been formally outsourced to Riders for over seven years. Now, the government has agreed to shift to TAM, which should set the stage for the Gambia to have a sustainable fleet of health vehicles for many years to come.

This case study examines the various operating models used by Riders over time, traces the evolution of health transport management in the Gambia from the perspective of key stakeholders, describes the elements involved in putting the model in place and financing it, and explores the diffusion potential of the TAM model as Riders looks to expand into other African countries. This report uses mostly qualitative and some quantitative information gathered through in-person meetings, phone calls, emails, online research, document review, and site visits in the Gambia.

2. ABOUT THE GAMBIA⁵

Geography and People: Although the Gambia is one of the smallest countries on the African continent, its unique geography makes health coverage a challenge. Located in Western Africa, it covers an area of 11,300 square kilometers and is surrounded by Senegal on three sides. See *Appendix E* for a map of the country. The Gambia River runs through the center of the country, and eventually meets the Atlantic Ocean. The long, narrow geography of the country combined with the Gambia River's prominence make ground transportation quite challenging. Of the 3,742 kilometers of roads extending through the country, 19.3 percent are paved. The country has a population of 1.78 million people, and it is estimated that 57 percent of the total population lives in urban areas. The largest ethnic group is Mandinka, and 90 percent of the Gambian people are Muslim.

History: The first Europeans in the Gambia River region, the Portuguese, established trading stations in the late 1400s. The Gambia was a British colony from 1821 until it gained independence from the United Kingdom in 1965.⁶

Politics: The capital city of the Gambia is Banjul, and there are five administrative regions: Upper River, Central River, Lower River, North Bank and the Western region. The current President, Yahya A.J.J. Jammeh took power in a bloodless military coup in 1994. The Vice President, Isatou Njie-Saidy, has been in the post since March of 1997. A new constitution was approved by referendum in August 1996, and provides for a strong presidential government, a unicameral legislature, and an independent judiciary. The legislative branch consists of a national assembly, with 48 members elected by popular vote and five members appointed by the President, each to serve five year terms.

Economy: Seventy five percent of the Gambian population depends on crops and livestock for its livelihood. Small-scale manufacturing features the processing of peanuts, fish, and hides. The Gambia's natural beauty and proximity to Europe has made it one of the larger markets for tourism in West Africa. Reexport trade also constitutes a major segment of economic activity. Unemployment and underemployment rates remain extremely high; short-run economic progress depends on sustained bilateral and multilateral aid, on responsible government economic management, on continued technical assistance from the International Monetary Fund and bilateral donors, and on expected growth in the construction sector.

3. HEALTH DELIVERY AND HEALTH TRANSPORT IN THE GAMBIA

Some of the major health challenges facing the Gambia today include malaria, maternal and infant mortality, acute respiratory infections, diarrhea and pneumonia.⁷ The United Nations Development Program (UNDP) ranks the Gambia as 160th among 179 countries in the Human Development Index,⁸ which aims to summarize a county's achievement in attaining a long and healthy life, access to knowledge, and a decent standard of living.⁹ As of 2004 (the latest figures available), public spending on health in the Gambia accounted for 1.8 percent of GDP, while private spending accounted for 5.0 percent. Per capita health expenditure was \$88 (PPP)¹⁰ in 2004, compared with \$6,096 in the United States and \$2,560 in the United Kingdom.¹¹

The Gambia has five hospitals and a mix of public, private and nongovernment organization-operated health facilities. The Gambian health system is relatively centralized, with six regional health teams implementing policies of the Ministry of Health. There has been high staff turnover in the minister of health position and in other government posts. This makes relationship

building and long-term planning difficult. Corruption is also perceived to be high (Corruption Perceptions Index ranked Gambia 158th out of 180 countries in 2008, where low rankings represent high corruption).¹²

The Gambia's six regions do not have a high degree of control over staff and resources, although those interviewed for this case study indicated there is a shift toward greater decentralization. Each region has various health care centers, which mainly provide preventative services such as weighing infants, immunizing antenatal women and children under the age of five, providing bed nets, and giving health talks. As part of Riders' new TAM program, each major public health center now has an ambulance, a trekking vehicle, and three motorcycles. Each minor health center has an ambulance and two motorcycles. Ambulances can pick up patients and either take them to a health care center or refer them to a higher level of service at a major health center or a hospital. Trekking vehicles and motorcycles are used by health workers for outreach work such as delivering immunizations.



Before Riders' involvement in the Gambia, vehicles and motorcycles were often used by officers and health workers for personal purposes, reducing the amount of time vehicle fleets were available for health care delivery. Drivers and health care workers received no preventive maintenance training. As a result, those interviewed reported that the useful life of vehicles as well as the number of kilometers the vehicles could travel each year was quite low. Securing funding for up-front vehicle purchase, spare parts, and fuel was also a challenge. It was not uncommon for a patient to be asked to pay for the fuel needed to take him or her to a hospital. Sometimes medical personnel would pay for fuel out of their own pockets to avoid patients being left without transport¹³.

4. A COMPARISON OF RIDERS' TRANSPORT MANAGEMENT MODELS

Today, Riders for Health offers three key service delivery models to clients and runs one or more of them in each of its seven operational countries. The two main models, TRM and TAM, operate using the zero breakdown technique and preventive maintenance approach. Until Riders can convince a partner to employ TRM or TAM, it may provide Interval Servicing (IS) in the interim. A description of each model follows:

Transport Resource Management (TRM): TRM uses a full logistical support system for fleets that facilitates efficient management. TRM's zero-breakdown preventive maintenance services enable increased mobility, reliability, and safety of health workers. Increased mobility facilitates more frequent access to more communities to provide prevention, diagnosis, and treatment. TRM depends on training, consistent supervision, and strong supply-chain logistics, with frequent and detailed audits.

- *Vehicle acquisition process:* Clients purchase their own vehicles or are given vehicles by external funders.

- *Payment scheme:* Riders charges a cost-per-kilometer (cpk) fee to the client, which is meant to cover costs for fuel, lubricants, maintenance, driver training, replacement parts, infrastructure and more. A vehicle replenishment fee is also built in (this fee goes into a replacement fund), so that Riders can build up funds to enable the client to purchase additional vehicles once existing vehicles come to the end of their useful life.

Transport Asset Management (TAM): TAM is a new system that sets up a means for governments to secure long-term program sustainability and streamlined fleet management. TAM includes all the components of TRM, except that Riders owns the vehicle fleet and can retire the fleet at its optimal residual value. Because Riders owns the fleet, there are fewer “wasted” kilometers (kilometers driven for personal use instead of health purposes) than with TRM.

- *Vehicle acquisition process:* TAM has only been implemented to date in the Gambia, where the Skoll Foundation underwrote a loan by GT Bank that enabled Riders to purchase its own fleet of vehicles. The Gambian government should no longer need to procure its own vehicles or obtain donated vehicles. In the future, if a donor wants to contribute toward health transport in the Gambia, the government would ask the donor for a financial contribution to pay for Riders’ TAM cpk fee instead of asking for an actual vehicle donation. This way, the government could remain uninvolved in the vehicle procurement and management process.
- *Payment scheme:* Clients are charged a higher cpk fee than TRM. The TAM cpk incorporates principal and interest costs for the loan Riders obtains to purchase the vehicle fleet. This saves clients the need to set aside large capital budgets for fleet acquisition.



Interval Servicing (IS): The least comprehensive service, IS utilizes the concept of regular, scheduled vehicle maintenance, and also incorporates driver and rider training. Unlike TRM or TAM, IS does not incorporate fuel costs and does not therefore tie in its customers as regularly to the preventive service schedule. This service is offered to ministries of health and other in-country agencies if they are not yet ready to commit to full outsourcing including fuel.

- *Vehicle acquisition process:* Clients purchase their own vehicles or are given vehicles by external funders.
- *Payment scheme:* Clients pay on a per-service basis instead of through a cpk system.

When none of the three models can be employed, Riders may offer Demand Servicing (DS), sometimes called distress maintenance. This is a reaction-based service in which Riders’ technicians respond to the customer’s own identification of vehicle needs (e.g., breakdowns, repairs) and provide appropriate servicing. Demand servicing is not suited to long-term health worker mobility, and crucially does not include any training for motorcycle users in carrying out daily maintenance checks, but it does provide a basic level of servicing for vehicles. As with Interval Servicing, clients pay Riders on a per-service basis. Based on their experience, Riders staff members in the Gambia interviewed felt that each of Riders’ models offers numerous advantages when

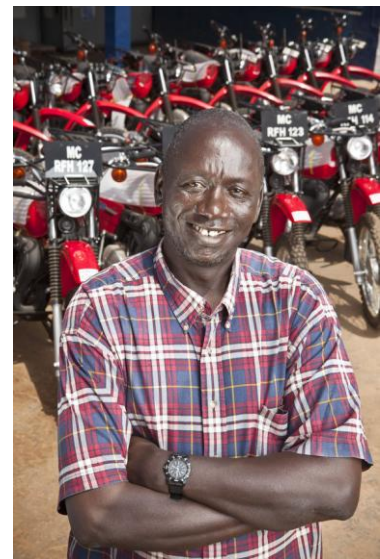
compared to government-operated transport maintenance. See *Appendix A* for a description of how various elements of Riders' transport models compare to government-run service, and *Appendix B* for a description of the costs embedded in each Riders model.

5. A HISTORY OF RIDERS FOR HEALTH IN THE GAMBIA

Riders began formal vehicle management for health services in the Gambia in 2002, but its informal history dates back to 1989. For a full perspective of the evolution of health transport management in the Gambia, it is helpful to look back to the state of health transport in the early 1980s.¹⁴

1980S - HEALTH TRANSPORT MAINTENANCE PRIOR TO RIDERS

In 1981, due to a failed government coup, rebels destroyed many Ministry of Health (MoH) vehicles. At the time, the Gambia had very few motorcycles, only two hospitals, and a few health centers. The German government provided a team of expert motor vehicle technicians to work in the Gambia for two months to refurbish damaged vehicles, and the MoH established a vehicle service center around this time. In 1983, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) donated 20 motorcycles to the Gambia. Ali Ceesay, today a deputy program director at Riders, was maintaining MoH officer vehicles and proceeded to assemble the donated motorcycles. Motorcycles were provided to health workers on a loan system. Loans lasted two years, even though motorcycles can have a useful life of five years if properly maintained. Health workers paid for fuel, parts, and private servicing. At the end of the two-year loan term, workers owned the motorcycles, although they typically sold them due to inability to afford upkeep.



In 1986, Ali Ceesay joined Save the Children Fund (SCF) as a driver, handyman, and assistant to the field director. SCF donated 86 Honda motorcycles to the MoH, without any loan arrangement. Health personnel went to the city of Banjul (see *Appendix E*) on a monthly basis and would buy spare parts there. Eventually, the MoH would build workshops in nearby Kanifing, Bansang, and Mansakonko. Ceesay offered to take over servicing of the SCF motorcycles in the Eastern province so SCF could stop paying private technicians. During this time period, the Overseas Development Agency sponsored a course for repair shop management in the United Kingdom, which two people now employed by Riders for Health (Lamin Nicol and Omar Jah) attended.

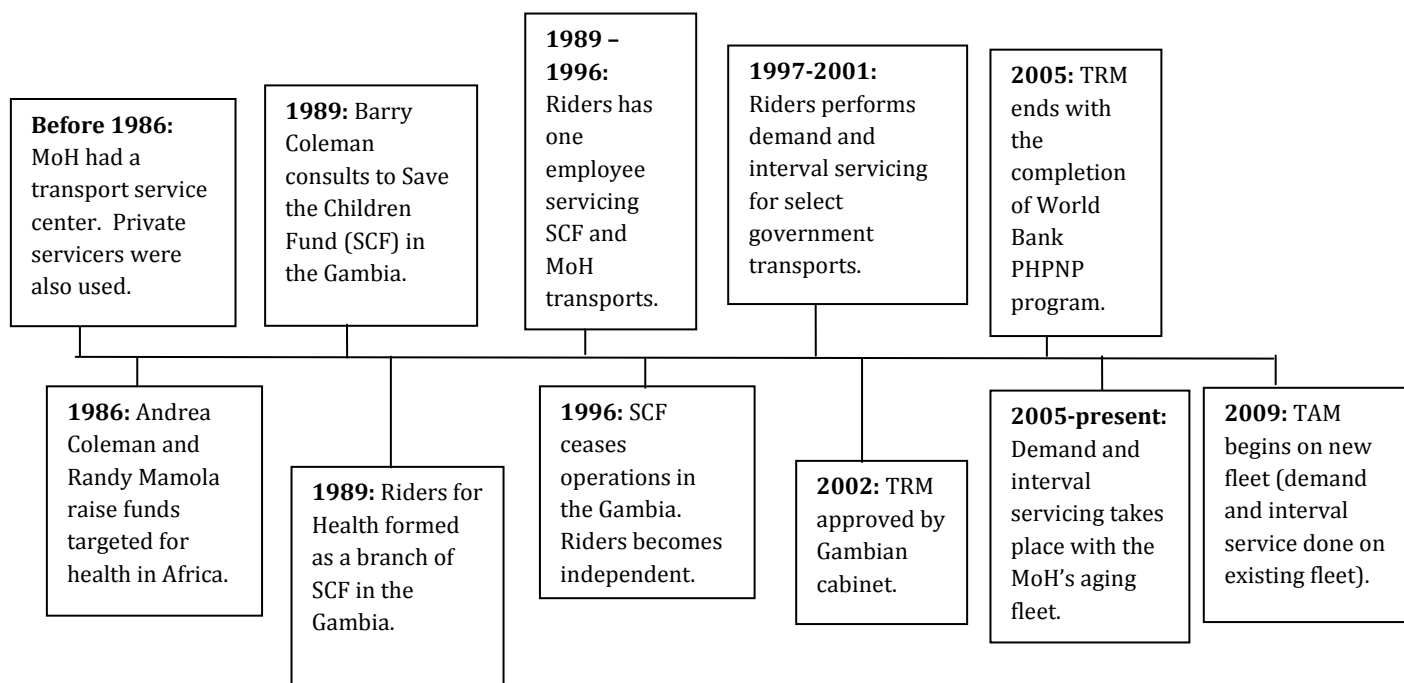
Barry and Andrea Coleman's involvement with health transport management began in 1986 when Andrea, a motorcycle team manager, and Randy Mamola, a United States Grand Prix motorcycle racer, began to raise money for SCF. At this time, Barry was a feature writer for the *Guardian* and also covered motorcycle racing. In 1988, Mamola and the Colemans were invited by

SCF to observe how the funds they raised were used to immunize children in Somalia and Mamola and Barry took the trip together. On the visit to Somalia, Coleman and Mamola were surprised to find that several motorcycles meant for health workers had broken down, sometimes after only 800 kilometers, and that semi-nomadic and isolated people were not being reached because health workers lacked transport. On further investigation, they discovered that breakdowns had occurred because no users, supervisors or support staff had been trained in basic motorcycle maintenance.

Subsequently, the World Health Organization (WHO) arranged for a team of consultants including Barry Coleman to assess the fleet of motorcycles donated by SCF and WHO in the Gambia.¹⁵ Before he had left the UK, the SCF head office showed Coleman the list of the 86 motorcycles he was to assess. As he traveled throughout the country, Coleman saw only one motorcycle in the Mansakonko area. The motorcycle was broken down, with grass growing so high around it that it had to be cut to see the motorcycle. By contrast, when Coleman traveled up-country to Bansang, he saw a group of 12 motorcycles that were still in operation. It was at this point he met Ali Ceesay. The 12 motorcycles were running solely because Ceesay was performing maintenance on them, even though he had few tools or formal expertise. Of the original 86 motorcycles, only these 12 motorcycles remained operational; the rest had either stopped working or had been sold.

According to Coleman, the moment he met Ceesay and saw his work, it “was a bit of an insight that a little goes a long way. I realized that intervention could have a big impact. Because of that, I developed the daily maintenance routine [for health workers’ motorcycles] called PLANS (Petrol, Lubrication, Adjustments, Nuts and bolts, Stopping).” Coleman’s trip led him to write a report to the MoH recommending, among other things, ending the motorcycle-lending program to health workers, giving health workers maintenance training, and providing protective clothing and helmets. Coleman’s report to the MoH was not acted upon. During this time, the government provided a monthly fuel allocation to health workers. When the fuel allocation ran out, motorcycles didn’t move unless health workers paid for fuel themselves.

EXHIBIT 1: TIMELINE OF KEY EVENTS



RIDERS BECOMES A BRANCH OF SAVE THE CHILDREN FUND

In 1989, with Barry Coleman's guidance, SCF recommended that the Gambia MoH form a motorcycle task force. Meanwhile, Andrea Coleman set about developing a range of fundraising events with the motorcycle racing community in the UK and Europe to support health transport maintenance in Africa and was hired by SCF to serve as director of a branch devoted to health motorcycle maintenance. The Gambian motorcycle task force included members from SCF, the director of health services in the government, regional health administrators, and others. Cherno Jallow, now also a deputy program director for Riders along with Ali Ceesay, was the first task force secretary. During this time, Riders was formed in the Gambia as a branch of SCF. Ali Ceesay was the only Riders employee, and he serviced SCF and MoH vehicle fleets (he was seconded to the MoH by SCF) on a demand service and interval service basis.

Although the number of health care workers and donated vehicle fleets continued to grow in the Gambia, the government often had difficulty paying running costs. Barry Coleman wrote several reports to the MoH during this time requesting permission to implement a managed transport system, but these recommendations were not acted upon.



Officer in Charge at Brikama Health Center

In 1991, Riders established a training and preventative maintenance system for motorcycles in Lesotho. By 1993, Zimbabwe was also implementing a system with preventative maintenance for vehicles and motorcycles. This eventually led to the formation of TRM in 1998 with a fleet of 55 motorcycles. By 1999 a WHO four-wheeled vehicle project for TRM in Nigeria had also been started. The program ran successfully there for six and a half years, during which time, Barry Coleman recalls "more vehicles were damaged by gunshots than by breakdowns." As part of TRM,

Riders for Health developed a six-week training course for technicians. The technicians became responsible for teaching health workers basic routine maintenance as well as intermediate-level services.

RIDERS BECOMES INDEPENDENT FROM SCF

In 1994, there was a bloodless coup in the Gambia. According to Ali Ceesay, SCF did not want to support a military government, and therefore, by 1996 it closed its Gambia operations. For this and other reasons, Riders became entirely independent of SCF, registering as its own charitable organization in 1996. From 1997-2001, Ceesay remained Riders' only employee in the Gambia.

Many times over the years, Barry and Andrea Coleman informally discussed implementing a managed transport system with Vice President Njie-Saidy. The vice president had been a community development agent and had personal experience falling off her motorcycle due to a lack of training; she had scars on her legs to prove it. However, according to Barry, "you couldn't shortchange the system [for getting things approved] and the vice president didn't want to pull rank on her colleagues that held the minister of health position at various times," so things didn't move forward.

In 2000, Therese Drammeh, now program director for Riders, became permanent secretary at the MoH. Drammeh had a wealth of experience working in the ministries of health, education, foreign affairs, interior, trade, information and tourism, and local government and lands. She had also worked in the president's office and had been in charge of the civil service personnel management office for almost four years.

When Drammeh started work as permanent secretary, the health transport maintenance system was disorganized and poorly financed. Government health transport maintenance was managed separately from other government functions because health vehicles such as ambulances couldn't afford to suffer long breakdowns, yet this separation didn't seem to prevent them.

Drammeh recalled that, "At times, Omar Jah, the MoH transport manager (who is now Riders for Health's operations director) would come to my office and say 'we have no fuel' or that 'most ambulances are grounded because we don't have replacement parts.' At one point, I had to ask WHO if they could help put some ambulances back on the road, and so we got some money for replacement parts. Other times, I had to ask the Ministry of Finance for additional funds to purchase fuel."

TRANSPORT RESOURCE MANAGEMENT (TRM) IS PROPOSED

Toward the beginning of Drammeh's tenure, Dick Seifman of The World Bank approached Drammeh to discuss the bank's Participatory Health Population and Nutrition Project (PHPNP). One of this project's components was maintenance of health infrastructure and logistics, and the funds allocated for this weren't being used. Seifman discussed the possibility of outsourcing the maintenance of health transport to Riders for Health. "At the time, Riders (in the Gambia) was low profile – just one person," Dawda Joof, then program manager of the PHPNP, recalls.

The World Bank was contracting with private companies for servicing, and non-World Bank government vehicles were maintained at the MoH transport workshop in Kanifing. Joof says, "When vehicles were bought in 1998, Barry [Coleman] approached the World Bank to offer to manage them. But,

as is always the case when you talk about these things, you have to get support from government officials...Some were not fully convinced about handing these vehicles over to Riders to manage.

EXHIBIT 2: KEY INDIVIDUALS INTERVIEWED (IN ALPHABETICAL ORDER)

- Ali Ceesay, Deputy Director 1 – Riders for Health (the Gambia)
- Andrea Coleman, Chief Executive Officer – Riders for Health (United Kingdom)
- Barry Coleman, Executive Director – Riders for Health (United Kingdom)
- Ed Diener, General Counsel – Skoll Foundation
- Therese Drammeh, Program Director – Riders for Health (the Gambia)
- Dawda Joof, Former Manager of The World Bank PHPNP program in the Gambia
- Omar Khan, Governor – Upper River Region of the Gambia
- Dr. Tamsir Mbowe, Former Minister of Health, the Gambia
- Dr. Malick Njie, Former Minister of Health, the Gambia
- Olalekan Sanusi, Managing Director – GT Bank
- Dick Seifman – The World Bank
- Alieu Sonko, Officer in Charge – Brikama Health Center
- Ganyi Touray, Governor – Central River Region of the Gambia

People were more focused on the cost of cpk...not the benefit. At the same time, there were no controls on kilometers.”

GENERAL MAINTENANCE POLICY IS APPROVED BY THE NATIONAL ASSEMBLY

During his visit with Drammeh, Dick Seifman mentioned that there had been a general maintenance policy drawn up that was probably collecting dust somewhere within the government. “So,” Drammeh says, “I listened.” The World Bank had already held discussions with Barry Coleman and felt that Riders was the one organization that could perform servicing for World Bank transport. After speaking with Seifman and Coleman, who was fed up by inaction and was ready to abandon the idea of expansion in the Gambia, Drammeh decided she wanted to do something serious about transport.

Drammeh says, “I asked for the relevant files...There was indeed a document gathering dust, so I moved it forward for approval.” The maintenance policy was approved by the National Assembly, and this, says Coleman, was a turning point. The next stage was to get maintenance outsourcing approved for the PHPNP program, which had funded 36 motorcycles and 22 vehicles. Since these vehicle fleets accounted for only one-fourth of the total health fleet, Drammeh felt it would be better to outsource maintenance of all government health vehicles, because “we would have fewer headaches, and could concentrate on drugs, facilities development, personnel, et cetera.”

When asked what convinced Drammeh about outsourcing transport maintenance, she described her personal experience. She had been given a vehicle when she was permanent secretary, and the maintenance of this vehicle was done through a private company. According to Drammeh, “the service was slow, the cost was high, and quality was not good.... I had a feel for the difficulty, so it strengthened my resolve that the government needs to put funding behind transport.”

TRM SYSTEM IS APPROVED BY THE CABINET

Drammeh prepared a draft cabinet paper about outsourcing all health fleet management to Riders and sought the support of the Ministry of Finance, the personnel management office, and the Ministry of Justice. All three institutions supported the paper, so the Minister of Health submitted it to the cabinet, which is comprised of the president, vice president and all ministers. The cabinet approved the outsourcing agreement. The process was smooth; according to Drammeh, “It helped that all three institutions had seen it [ahead of time].”

As Joof recalls, before the approval, “there was a period of convincing and trying to negotiate to agree on the idea of handing over vehicles. Barry had to do a good job of getting the minister and vice president on board with TRM and cpk. By the time they agreed to move, some World Bank vehicles were already one year old or more.” Drammeh believes it made it easier to push the Riders proposal through because the overall general maintenance policy for health transport had already been approved. Once the TRM proposal was approved by the cabinet, since there were no comparable alternatives to Riders, the World Bank waived its requirement that multiple bids be obtained, and did a “sole source” program for transport maintenance.

From the 1990s through 2001, the MoH budget contained several small line items labeled “operations and maintenance of transport” and others labeled “operations and maintenance of generators” (for generators that are used to power health centers). Drammeh used to have to approach the permanent secretary of the Ministry of Finance for additional funding at times — a process, which, in her words, “was a nightmare.” For the 2002 budget, Drammeh proposed lumping the various line items together and setting them aside for payments to Riders. The Ministry of Health used this budget to pay for demand service for old vehicles and motorcycles on a fee-for-service basis, and for TRM for the new vehicles through the cpk mechanism. Maintenance costs for 51 generators were still covered under this lump sum.

In October 2001, after 18 months on the job, Therese Drammeh was retired from her position as permanent secretary. Coleman immediately offered her a consultancy contract to expand the Riders for Health Gambia program and subsequently offered her the position of program director. Coleman says Drammeh has had a great deal of support within the government since becoming program director.

TRM CONTINUES UNTIL 2005

Although Riders was supposed to perform demand service on MoH transport, at times, it ended up funding fuel and other items (which are not normally part of a demand service arrangement) when the government would run out of funds. Drammeh says, “Yes, you could say we [Riders] were doing it at a calculated loss. We wanted the government to see the difference between a properly managed system and a poorly managed system... And because of that, over time we were able to get the government to increase the budget from a very little amount to 12 million dalasis by the 2008 budget.”

Dawda Joof says that the government was concerned about costs, and rightly so. World Bank policy was that ten percent of project costs should be borne by government, and it was a challenge to secure that amount for many of its other projects. The cpk arrangement had a replacement component so that reserves could be built up in a special bank account for the government to purchase a new fleet in the future. However, since World Bank vehicles were already one year old or more, maintenance proved costly over time, and there wasn’t enough money to replace the entire fleet by the end of the contract in 2005.

Another problem during the contract period was finding genuine spare parts locally. Since the World Bank had purchased vehicles from a private company but was now using Riders for maintenance, the private company was not cooperative. Company personnel were unwilling to provide parts catalogue numbers, which added a layer of complexity to Riders’ work. Thanks to the cpk arrangement, however, Joof says that fuel was not a problem.

When TRM was first implemented, there was pushback from MoH personnel, as people were not used to the system of accounting for gasoline and bringing vehicles in for preventive maintenance. Over time, however, Drammeh says that Riders built trust and a track-record with the government, and the government received good feedback about Riders’ effectiveness. At various



points, fuel was in short supply across the country, but people still saw ambulances and health transport moving because Riders made sure there was fuel in their depots at all times.

In 2005, The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) donated new Suzuki TF125 motorcycles to the Western region for all community nurses, but according to Ali Ceesay, they were unsuitable for field workers.

THE SHIFT TO TRANSPORT ASSET MANAGEMENT (TAM)

Barry Coleman had been considering the concept of leasing vehicles for several years as a solution to the difficulties health ministries had in finding adequate upfront funds for a large fleet purchase. He also felt it was a way of ensuring that the vehicles were reserved solely for healthcare delivery and not abused. During Barry and Andrea Coleman's visit to the Gambia in 2006, Barry spoke to Vice President Njie-Saidy about a TAM proposal to lease vehicles to the MoH. Barry, Andrea and the Riders Gambia team requested that the government seek financial support from the Department for International Development and the Global Fund. The vice president directed the minister of health to write letters to both the British High Commission and Global Fund, but no funding came as a result.

In 2007, the Colemans requested that a letter of intent be signed by the minister of health authorizing Riders to seek funding for the proposed leasing program. The letter was provided by Minister Tamsir Mbowe, who served from 2005 to 2007. Dr. Malick Njie then took the post of Minister of Health and decided to move forward with the TAM idea even though external funding for the running cost of the proposed new fleet had not been secured. Negotiations continued with the Skoll Foundation in which the foundation worked in a three-way partnership with GT Bank to lend Riders money to purchase the TAM vehicle fleet. See Section 6 titled "Financing of the TAM Model" for further details of the Skoll/GT Bank arrangement.

When asked what convinced Dr. Njie that TAM was the right solution for the Gambia, he gave several reasons. For one, he says, "I grew up in the system. I can understand at every level of the system the needs and why people are leaving the service." Dr. Njie developed a two-year interim plan to reorganize the health sector, and the TAM program was to be one part of this. Dr. Njie says he realized the benefits of TAM would be "enormous." "For the first time in the history of the health sector in the Gambia, we looked at the *complete* logistics support system...I looked at what is best. I realized that using old vehicles would not deliver what we wanted to deliver."

When he first raised the idea of TAM and people in the Ministry of Finance objected to the cost, "I said, look, let's put our hands together, and put our resources together. We have so many programs that have logistics included in them...If we continue the way we are, you don't realize it, but we'll spend much more money than we spend now, and we're still not getting anywhere." Dr. Njie cited an example of what happens when resources are not combined. "There are so many Global Fund programs to buy and maintain vehicles," he said. "They come in different forms: the malaria program, the HIV program, all of them thinking in only one direction. They manage their own transport maintenance with private servicers. All think only in their own buckets."

DETERMINING THE FLEET MAKEUP FOR TAM

While the financial negotiations were ongoing, the Riders Gambia and UK management teams worked with the MoH to discuss the number and types of vehicles required and funding of the running costs. It was established that 91 vehicles and 150 motorcycles could adequately cover health service requirements. The Riders allocation in the health budget for 2009 was doubled (from 12 million dalasis in 2008 to 24 million dalasis), but a total of 48 million dalasis was needed. The proposal for Round 8 of the Global Fund also contained a budget for operation and maintenance of the Ministry of Health vehicle fleet. However, the proposal was eventually significantly cut, and the operation and maintenance line item was significantly reduced.

THE CURRENT STATUS OF TAM

By June of 2009, due to a government funding shortfall, about two-thirds of the originally envisioned vehicle fleet was purchased and placed into service. For many of the country's health centers, these vehicles were the first of their kind deployed. In remote areas, ambulance services had been previously unknown. Given the fleet's reliability, vehicle utilization rose to a much higher level than originally budgeted, leading to much higher monthly bills from Riders. The monthly shortfall grew over time. The new health minister refused to pay monthly bills despite the signed contract, and at one point, Riders stopped services and parked vehicles in protest.

The Gambian president, on a tour of the country in late 2009, continued to hear praise for the Riders program. In 2009, TAM motorcycles travelled over 740,000 kilometers, and ambulances and trekking vehicles travelled over 1 million kilometers. The president subsequently fired the health minister and Riders received all owed payments. In late January, Riders Gambia received from the MoH a lump sum payment of 24 million dalasis for the first eight months of 2010.

Riders is now working with the MoH on plans to get the rest of the fleet in service in 2010. As evidenced by the wide variance of support for Riders from recent health ministers, turnover of government personnel is a challenge that does affect budgets. Dr. Njie had given his word that the government would find a way to secure full funding for TAM, but he was subsequently let go, and the latest minister (who was also subsequently let go in 2010) did not support the program. To circumvent the challenges that arise with frequent government turnover, Riders continues to seek outside funding sources.

STAKEHOLDER OPINIONS ABOUT RIDERS

According to the head of the Western region health team (RHT), who oversees an area with more than 900,000 people, there have been several important improvements to the health system in recent years: the refurbishing of major health centers, a new school of nursing, an increase in the availability of vaccines, more health vehicles, and improved health transport maintenance. In terms of health gains, the head of the RHT cited a decrease in malaria morbidity and mortality and a decline in infant mortality. One area she cited where Riders has made a positive impact was in maternal mortality. She mentioned three points of delay in the treatment of a woman in obstructed labor:



1) when the patient decides to go to a health facility; 2) when she is transported from a health facility to a referral site (a major health center or hospital); and 3) when she receives care at the referral site. Riders can affect the first two points of delay; if a patient knows that transport will be available, she will be more likely to go to a health facility, and from there, she can be transported quickly to a referral site if needed. When asked to consider the overall impact Riders has had on health in the Gambia over the last few years, Dr. Njie said he would attribute 70 percent of health improvements to Riders and former minister Dr. Mbowe put his estimate at 75 percent. The Western region health team manager felt that Riders accounted for 60 percent of overall health improvements. While these are strictly subjective assessments given during the course of interviews and could be interpreted in different ways, they illustrate the point that key stakeholders perceive Riders' contribution to recent health improvements to be significant.

Dr. Njie says that, after his cabinet defense of the TAM program, "The president said 'Why don't we take all our vehicles to a place like Riders for Health?'" He says, "Riders is an institution. Forget about health. What they are doing for the health sector, they can do for education, for works, and for communication...They are providing a highly needed service. One has to be honest; if you cannot do something, look for someone who can do it. If someone offers you something that is exactly what you want at a reduced cost, with increased benefits, you will reject that only if you are a fool...Women in this country die because they don't have transportation to where they should properly deliver [a child]."

In recent years, as an indication that Riders has no shortage of options to expand its reach, Riders has been asked to provide services to groups unaffiliated with the health sector. About five years ago, the Gambian port authority asked Riders to maintain its staff buses. Riders agreed because the port was important to the country's economy and in such a small country there is no other effective option. Through the TRM cpk arrangement, Riders eventually collected enough funds to pay for three new buses. Four years ago, Shell asked Riders to transport its fuel to filling stations across the country as well as carry jet fuel to the airport. Again, after careful assessment and consideration, Riders agreed to do this because there was no other effective transfer of fuel in a country as small as the Gambia. Now, even though Shell's business in the Gambia was bought by another company, Riders still provides transport service for that company. Recently Riders was approached to provide fleet maintenance to other government services, and is considering this request.

In Dr. Njie's opinion, TAM is an efficient system that maintains itself. "You cannot compare that with a system that is full of problems – fuel problems, vehicle maintenance problems, driver problems...Today, if a ministry official wants to go to Basse, he just fills out a form, sends it to Riders, and a person moves." To Dr. Njie's knowledge, nothing comparable is outsourced by the government. "I think we were the only ones bold enough and reasonable enough to believe in that concept, that outsourcing actually solves problems."

Vice President Njie-Saidy spoke at the launch of the TAM program in February 2009 and said:

"The choice of Riders for Health as a partner in this venture was based on the high level of trust and confidence we have in the organization's experience in efficient operation and maintaining of institutional (health sector) transport systems. Since January 2002, when Riders for Health took over the management

of the national health fleet, we have noted with satisfaction a significant improvement in our health referral system, health outreach services, and timeliness of transportation of much needed medical supplies and drugs to the health facilities across the country. I am convinced that the success of TAM will amplify the inroads government makes in the area of public health care and would put primary health care at the center of the health care system in the Gambia.”

Regional governors have reported that community members in rural areas are especially pleased with the TAM system. The governor of the rural Upper River region reported that, “Prior to Riders, we used to have a lot of difficulties in transporting patients from health facilities to hospitals. Since Riders, that has been reduced considerably. Every facility in my region has a brand new ambulance and we are no longer faced with the problem of having to get fuel for ambulances before we can take patients to hospitals...We have very qualified drivers now...During the last tour of the president, they told him they were very pleased with Riders and the Gambian government.” When asked whether governors can influence the national government’s decisions to fund various priorities, he said, “Yes, they listen more to us than anybody else because we deal directly with people in rural areas.”

The governor of the Central River region, which is the largest in the country in terms of land and has 150,000 people, reports that misuse of vehicles was high prior to Riders. “Before, the officer in charge of the hospital may have used the vehicle for personal reasons, finishing the supply of fuel. When the demand arose, there would be no fuel left.” He reports that transport costs have risen because more patients are coming in. Still, he says, “There is no cause for complaint.” The governor has seen an increase in demand for supplies, and expects that personnel shortages will continue to be a problem. Also, both governors reported seeing patients from Senegal come to their regions for health care.

6. FINANCING OF THE TAM MODEL

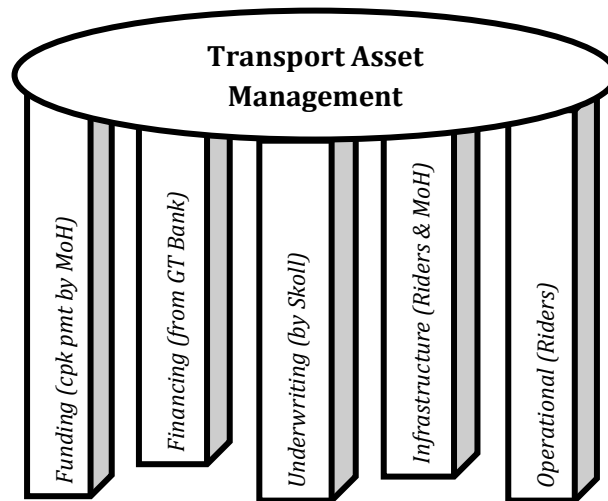
In 2008, health spending constituted approximately four percent of the national Gambian budget (see *Appendix D*). Health transport constituted approximately four percent of the total health budget; therefore, approximately 0.16 percent of the national budget was devoted to health transport that year. In 2009, the 29 million dalasis paid for the TAM program represented ten percent of the total health budget, and 0.52 percent of the national budget. Since TAM covers capital costs, the need for an additional capital budget for transport is eliminated. Several health and health transport management professionals interviewed noted that health transport should be the third or fourth largest line item in a health budget (after salaries, buildings, and medicines).

A vast network of individuals within Riders and the government were involved in enabling Riders' migration from Demand Service and Interval Service to TRM, and finally to TAM. However, a critical link in the chain of events leading to the creation of TAM was the development of the financing model. Chief Executive Officer Andrea Coleman managed this process, and it involved the Skoll Foundation, Nigeria-based GT Bank (their Gambian branch), Riders (both UK and the Gambia), and the Gambian Ministry of Health.

The TAM system is sometimes described within Riders as a five-legged stool. It requires 1) a funding partner, 2) a financing partner, 3) an underwriting partner, 4) an operational partner, and

5) strong infrastructure. In the case of the Gambia, the funding partner is the MoH, which uses internal and donor funds to pay Riders' cpk fee. The operational partner is Riders, which runs fleet management services for the MoH in exchange for the cpk fee. The financing partner is the Gambia branch of the Nigeria-based GT Bank (used by Riders for many years for its standard banking needs), which provided a five-year loan to purchase a standardized fleet. The underwriting partner was the California-based Skoll Foundation, which provided a credit guarantee on the loan. In the case of the Gambia, the fifth leg, infrastructure (such as workshops, fuel depots and human resources), was already in place.

EXHIBIT 3: THE "FIVE-LEGGED TAM STOOL" IN THE GAMBIA



SUMMARY OF THE AGREEMENTS RELATING TO TAM

1. **Elements of the agreement between Riders for Health and the Ministry of Health:** Services are to be provided by Riders (provision of vehicles, vehicle management and maintenance including fuel, drivers, training in driving and riding, riding gear/protective clothing, workshop equipment and tools); the agreement includes expectations of the ministry in terms of vehicle management; it describes cpk pricing, which includes an element that will help repay the loan provided by GT Bank. The Ministry's cpk payments to Riders Gambia are in dalasis and deposited into a Riders Gambia account at GT Bank.
2. **Elements of the agreement between Riders for Health and GT Bank:** This is a loan agreement between Riders and GT Bank. It includes the interest rates (capped and related to interest paid to the Skoll Foundation on its deposits, as described later), drawdown process, repayment terms, and conditions of the loan; the agreement includes special clauses concerning the guarantee agreement with Skoll.
3. **Elements of the agreement between GT Bank and the Skoll Foundation:** This is a credit enhancement agreement. Skoll agrees to deposit US dollars in GT Bank as pledged

collateral for equal amounts requested by Riders on its GT Bank loan commitment, up to a loan value of \$3.5 million; the loan and the collateral are converted into dalasis. The agreement includes the terms under which the funds are released from GT Bank's collateral pledge and become eligible for withdrawal by Skoll; GT Bank pays Skoll interest on deposited funds, up to a capped amount.

4. ***Elements of the agreement between Riders for Health and the Skoll Foundation:*** This is a reimbursement agreement between Riders and Skoll. It includes the interest rates, repayment terms, and other conditions of any loan that would result should Riders not pay any part of its obligation to GT Bank and, as a result, GT Bank seizes Skoll's deposited collateral funds in payment.

BACKGROUND TO THE FINANCING ARRANGEMENTS

The Skoll Foundation's involvement with this project began in 2006. Riders had become a foundation grantee, and the Colemans approached the foundation to discuss ways to increase Riders' scale. Riders felt they could no longer grow with the TRM model due to the problems that arose from the separation of transport ownership and maintenance responsibility. As Ed Diener, the Skoll Foundation's legal counsel and a chief architect of the TAM financing arrangement recalls, "They [the Colemans] wanted to think out loud about leasing on a fleet basis. They knew that, by themselves, they couldn't qualify for the financing associated with changing to [the TAM] model at any scale, certainly not on a fleet scale." Based on this conversation, the Skoll Foundation provided Riders with a planning grant to more fully develop their leasing idea.



Andrea Coleman recalls that constant communication was needed to provide the Skoll Foundation with the information they needed before they could agree to the financing structure. Diener made the first of two trips to the Gambia in the spring of 2007 to conduct due diligence. Riders prepared a full business case for TAM, and by summer, the Skoll Foundation board had authorized \$3.5 million to buy a country-wide fleet. The money was to be used as a credit guarantee for GT Bank, so that, if Riders defaulted on its loan, GT Bank could count on the money the Skoll Foundation had deposited with them. This arrangement eliminated GT Bank's risk that the government might not honor its commitment to Riders. As the bank's managing director Olalekan Sanusi said, "Riders is a good customer, but a good customer can turn bad if somebody owes them an obligation and doesn't perform." Along with the credit guarantee, the Skoll Foundation also provided a companion grant to fund certain infrastructure, such as an additional repair shop in the North Bank, making the country-wide vehicle maintenance network more functional.

Diener recalls that it took time to seek out a solution for paying the funding leg of the "stool"; the cpk fee. At one point the MoH appeared hopeful that Riders would find a solution or pay for the running costs themselves. This was not aligned with Riders' social enterprise¹⁶ model built on finding sustainable solutions. Then, Diener says, "there was something of a breakthrough with the Ministry of Health...they decided they would find the money to pay for it themselves." In

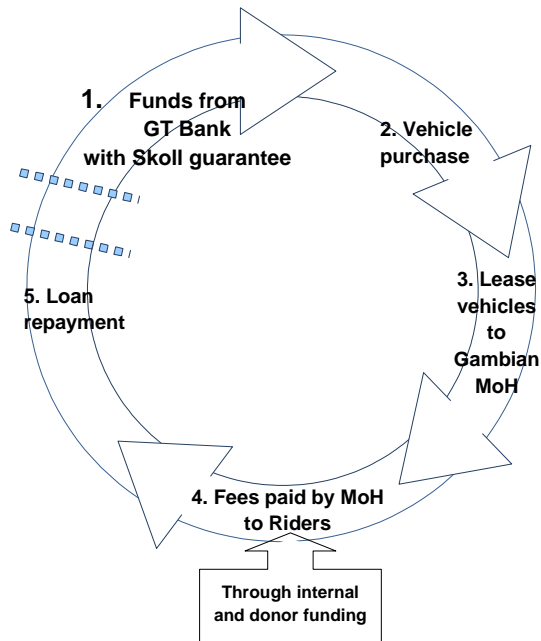
Diener's opinion, "Gambian [Riders] staff and Riders UK senior management worked with government staff to make this happen." The Riders team showed the MoH's finance and planning department that they had multiple pockets of funding in the budget for transport. The MoH then realized that if they channeled donor funds into paying for TAM instead of buying vehicles, they would be close to covering the running costs of TAM. The remaining running costs were requested in the Global Fund Round 8 proposal, but eventually removed.

Reflecting upon the financing arrangement, the fact that an African bank agreed to make a long-term loan to a nongovernmental organization is highly unusual. Riders felt it was important to use an African bank to engender more confidence in African institutions. They wanted to test the model with a bank rather than with Skoll as financiers, and they also felt that if Riders wanted to expand, other local banks could then relate to the GT Bank experience and create a similar arrangement themselves, providing that they could find a loan underwriter.

How did GT Bank first react to the idea of lending to a nongovernmental organization? Bank managing director Olalekan Sanusi said, "When a customer says 'I need money for a longer term,' it becomes difficult, especially in developing countries. Most commercial loans are 18 months to two years. A five-year loan is very hard. As soon as Skoll came in, they made the decision process very simple." The Skoll Foundation tells the story a little differently. According to Diener, "It was quite a struggle for the GT Bank team to get their minds around this whole idea of a nongovernmental organization conducting this large, multi-year business transaction...While I think GT Bank was not reluctant to do it, it took an extraordinarily long time by our standards for them to internalize what we were talking about to the point where they would present a structure that resembled what Riders needed." And as Andrea Coleman recalls, GT Bank wanted a much higher interest rate at first than what was eventually agreed to after negotiations. "We convinced them that it was good public relations," says Coleman.

GT Bank had offered Riders financing for the purchase of fuel tankers in the past, but this was because Riders was managing vehicles for Shell, "a name we could take on our risk profile," according to Sanusi. The tanker loan was a standard commercial bank transaction. The TAM fleet loan, however, is seen by GT Bank as a partly philanthropic effort. In the past, GT Bank had made some commercial loans to nonprofit organizations, but only in cases where security was available (for example, they made a loan to an organization to finance the construction of an auditorium, but that loan was secured by land).

EXHIBIT 4: TAM LOAN AND REPAYMENT CYCLE



The TAM loan arrangement consists of the following main elements: GT Bank pays a below-market rate of interest to Skoll of LIBOR (London Interbank Offered Rate) plus 1 percent, capped at 5 percent. Riders pays a rate of LIBOR plus 3 percent to GT Bank, capped at 8 percent. This cap reduces the interest rate risk borne by Riders. The resulting 3 percent "spread" goes to GT Bank. The rate caps also help to control the cpk charged to the MoH. In addition, the bank waived its management fee of one percent, and reduced two other fees: one that is usually charged on every debit, and a separate arrangement fee. Because of these concessions, the bank sees the loan as having a philanthropic element.

From the Skoll Foundation's perspective, Ed Diener describes the support as a program-related investment (PRI). Typically, PRIs are loans or equity investments. However, in this case, the foundation provided credit support, or credit enhancement, while GT Bank made the actual loan. As Diener explains, "this form of credit support is rather unusual for foundations to do, certainly," although Diener says he has used this arrangement at other foundations before. This was the Skoll Foundation's seventh PRI, but the first such credit enhancement. Diener says, "The Skoll Foundation tries hard to apply the right tool for the task at hand."

Since the foundation fully guaranteed the loan, GT Bank dropped its concerns of credit risk. Also, Skoll agreed to bear the exchange rate risk. Exchange rate risk existed because Riders needed a loan in dollars to purchase vehicles and motorcycles from abroad, yet it was being paid over time by the government in dalasis, and would be, in turn, paying dalasis back to GT Bank. The dalasi to dollar exchange rate could fluctuate from the time the loan is granted to the intervals at which the loan is paid back. As a result, while Riders could repay GT Bank, it is possible that Skoll ultimately would receive back fewer dollars than originally deposited, because of potential dalasi devaluation over the loan term.

Once credit and exchange rate risks were mitigated by the Skoll Foundation, the arrangement was possible. Sanusi says, “Riders was happy, GT Bank was happy, Skoll was happy. I got emotional about the whole thing...This is the first time it has happened in Africa. I think this can be replicated in other African countries.”

From the perspective of Riders, executing the TAM arrangement meant several major shifts for the organization. Andrea Coleman says, “TAM has raised philosophical and strategic questions...Dealing with TAM means we change from a vehicle fleet management organization to an organization that deals with logistics and leasing.” The logistics element comes into play because Riders owns the vehicles, yet at times it transports goods such as vaccines and bed nets that are owned by other parties. If Riders develops a TAM model in another country, it would likely be on a much larger scale, and the leasing element would be significant. “What if we owned \$100 million of vehicles?” The insurance costs, liability, relationships with partners required and other elements are what Coleman says keep her awake at night.

The development of TAM has not only caused an operational shift for Riders, but a shift in funding strategies. While historically, Riders held numerous fundraisers through motorcycle racing events, obtained grants and other more traditional means of funding, the organization has had to raise debt capital with the advent of TAM. As Andrea Coleman puts it, “In six months time, I went from knowing nothing about banking to discussing LIBOR rates.”

Coleman says one cannot underestimate the human resources and physical infrastructure costs involved with developing a comprehensive health transport maintenance system. For example, in the Gambia, even though most of the infrastructure needed for TAM was already in place, Riders requested a \$160,000 grant from the Skoll Foundation for computers, training, a workshop on the North Bank of the country, and more.

If TAM expands into other countries, Riders will face some new human resources challenges. “If this works,” says Coleman, “we will need people that can do high-level deals with banks...We’ll have to get people to change their skills, or get people with those skills.” Along with internal staffing adjustments, the organization will have to collaborate with many more stakeholders. Coleman spent a considerable amount of time working to align all the parties involved with the Gambia TAM program, from board members, Riders UK staff, and Riders Gambia staff to GT Bank, the Skoll Foundation, the MoH and others. The complexity of managing these multiple relationships has proven for Coleman to be more challenging than managing traditional donor-grantee arrangements. Still, she says, in hindsight she wouldn’t change anything.

Although coordination, geography, complexity, and novelty made the process of developing the Gambian TAM deal quite slow, all parties believe that this model could be more easily replicated in the future. According to Mr. Sanusi of GT Bank, “If we were to do this today, it would take two weeks now that the structure is set.”

From Ed Diener’s perspective, the template is set as well. “I wouldn’t call this project financing solution the beginning of a trend,” he says, “since few foundations deploy their assets in this way and even fewer are willing to do so in the developing world.” However, he says, “bigger solutions all start somewhere, and we achieved an important goal: an African bank now has the model in hand and can replicate it elsewhere much more easily than (when) it was invented.”

Riders for Health expects that, in five years, the second round of the TAM loan will be half the size of the first round. This is because although the portion of the cpk for the replenishment of

the fleet is being retained overtime to build up a fund for the purchase of new vehicles outright, five years from now, the fund will only cover about half of the total purchase cost of the TAM fleet needed. That half-size loan will still, in GT Bank's opinion, require a credit enhancement. However, for the *third* generation fleet (in 8-10 years' time), the Gambia should have the funds to purchase the entire replacement fleet outright and avoid obtaining a loan. This is the point at which a self-sustaining fleet will be achieved for the government. As Andrea Coleman says, "In eight to ten years, we should be debt free." If Riders implements TAM in another country, it will likely need a much a larger loan and accompanying credit enhancement to purchase the initial fleet.

After the TAM program was launched, the Ministry of Health's existing vehicles (33 vehicles



Technicians at Riders
Gambia headquarters

(33 vehicles donated by UNICEF and others, and 19 Global Fund vehicles) were deployed as back up vehicles to be used in emergencies. The TAM program has yet to receive full funding, so plans of purchasing an additional 28 vehicles and 60 motorcycles have still not been implemented. Ultimately, Joof feels that there is no substitute for strong government commitment and coordination of programs. In the Gambia, when Joof worked at the Project Implementation Unit of the Ministry of Health, he was asked to coordinate health sector activities, but he says, "We could not even move

because we didn't have responsibility over WHO, UNICEF, or other people to bring them to a meeting. It has to be a government policy and a commitment."

In Drammeh's opinion, you should not underestimate the groundwork that needs to be laid before signing a contract. She recommends that you should have the right approvals from the government to pay the cpk before you present the contract. "Even if some officials don't like it, they'll have to fall in line because the highest level of government has agreed to the contract being signed." Before implementing a TAM system, Drammeh says, "Make sure there is sufficient fuel storage, fuel, stores, supply of parts, well-trained technicians, drivers, et cetera...If Riders doesn't operate in a country, it should take 6-8 months to set up operations if you have a good plan. You can do things simultaneously, or you can start gradually." Barry Coleman says that the TAM system requires the least infrastructure of all models, because it is much easier to set up a supply chain for changing standardized oil filters on time rather than storing all the parts needed for unforeseen major breakdowns of multiple makes and models of vehicles. Regarding the status of the TAM program in the Gambia, Drammeh says that, "Already we have given them [the government] more than their money can buy, but we are advising them on how to get additional resources because some of us have had experience running ministries. We can still advise ministries, and I hope they will act on our advice."

While the TAM financing model provides a good template for Riders as it tries to expand into other African countries, there is also a potential that a PRI such as this could be applied to other services in developing countries. Diener says, "Our kind of capital is often the only kind of capital available to address shortcomings in access to bank capital by charities. In situations such as this one, in which the dilemma is finding funding up front to acquire assets for which there are users willing to pay over time, charities lack the equity capital with which to leverage their balance

sheets and solve the problem. No one wants a personal guaranty on assets in another country, even if the charity's leadership were willing and able to provide collateral. The solution we devised suits the situation, and could also be used for financing acquisition of land and/or buildings to be used for center-based social service provision or health care provision." Andrea Coleman agrees, and thinks that this type of financing mechanism could be used for hospital equipment such as x-ray machines, for example, where a social enterprise purchases equipment and the government or a patient pays a cost per unit for the use.

Coleman says that, unlike microfinance, which typically uses equity funds to deploy small amounts to individuals, the Riders TAM model involves "macrofinance," large amounts of funding deployed to an African government. The key is to have a way to "discipline" the payor if payments stop. In health transport, Riders can simply stop running vehicles. In the example of hospital equipment, there would need to be a way to stop usage of equipment if payments are not coming in.

What does Coleman hope for when the vehicles purchased for TAM reach the end of their useful life? She says she would like to be able to obtain a standard commercial loan without donor backing because they have developed a track record. However, she concedes that this may not be attainable in the near future.

7. DRIVERS OF RIDERS' SUCCESS IN THE GAMBIA

Reflecting upon the evolution of Riders in the Gambia, there have been at least three key moments in its history. The first was Barry Coleman's encounter with Ali Ceesay that helped inspire the Colemans to form Riders for Health. The second was Therese Drammeh's persistence and deft negotiating in getting the government to outsource transport maintenance to Riders in 2001. The third was Andrea Coleman leading the effort for the Skoll Foundation and GT Bank to lend the capital for purchasing the TAM fleet, which resulted in a five-year TAM agreement with the government of the Gambia. In this section, we explore some of the factors that contributed to these accomplishments over time.

EXHIBIT 5: HOW KEY OBSTACLES WERE OVERCOME IN THE GAMBIA

	1989 Establishment of Riders Gambia	2002 Establishment of TRM	2009 Establishment of TAM
Key obstacles to be overcome	<ul style="list-style-type: none"> • No precedent for transport-focused nonprofit organization 	<ul style="list-style-type: none"> • Pre-existing MoH transport management facilities 	<ul style="list-style-type: none"> • Lack of access to commercial financing • Unclear if Global Fund would pay cpk • Perceived high cost of Riders cpk
Key factors in overcoming obstacles	<ul style="list-style-type: none"> • Nurturing by SCF • Colemans' initiative • Riders raising funds from motorcycle racing industry • Riders developing concept of preventive maintenance 	<ul style="list-style-type: none"> • Visionary and strong permanent secretary with wide-ranging experience in government and high-level contacts pushed general maintenance policy through National Assembly and TRM through cabinet. Then was appointed Riders Country Director • World Bank support for contracting out support services • Sustained communication by Colemans with Gambian government 	<ul style="list-style-type: none"> • Former Finance Ministry permanent secretary appointed to Riders/Gambia • Support from Vice-President and successive Ministers of Health • 20 years accumulated track record • Barry Coleman designed operational leasing model based on TRM experience • Andrea Coleman developed financing arrangement with Skoll Foundation and GT Bank • Riders serviced govt's older fleets at a loss to demonstrate well-run system • Track record with port authority • GT Bank had track record lending to Riders

A key element that has helped at various points in time is the influence Riders' staff has held with government. Many Riders employees have previous ties to Gambian ministries, which can help in affecting government decisions. Ali Ceesay, who was contracted out to the Ministry of Health transport unit at one point, (and one of the original inspirations for Barry Coleman's vision of the Riders preventive maintenance system), is now a deputy program director at Riders in the Gambia. Therese Drammeh was former permanent secretary for the Ministry of Health. Karamu Bojang, now Riders administrative director, was a former permanent secretary of finance. According to Drammeh, recruiting Mr. Bojang greatly helped in obtaining approval for TAM. Omar Jah, now Riders' operations director, was formerly the Ministry of Health's transport manager. Cherno Jallow acted as director of planning at the Ministry of Health prior to becoming deputy program director at

Riders for Health. Drammeh knew Vice President Njie-Saidy well because she had worked with Njie-Saidy before the change of government, when Njie-Saidy was executive secretary at the Women's Bureau and Drammeh was deputy permanent secretary at the President's Office. Njie-Saidy was a former community development agent who understood the difficulties of using a motorcycle without training.

There are several driving factors that contributed to the government's decision to outsource transport to Riders in 2001. First, the Ministry of Health already had a transport unit in Kanifing set up which made it aware of its shortcomings (i.e., lack of trained technicians, inadequate resources for fuel, lubricants or genuine replacement parts), so, according to Drammeh, "there was a stool to step on." Second, a general maintenance policy was pushed through by Drammeh to the National Assembly first, making the Riders proposal easier to approve. Third, Dick Seifman at the World Bank, who had been seeking the advice of Barry Coleman, worked with Therese Drammeh to advocate for TRM for the fleet of vehicles and motorcycles purchased from a World Bank loan to the Gambian government. Finally, not to be downplayed, Therese Drammeh was a charismatic, passionate, committed individual who understood the value of Riders for Health and knew from personal experience how poor the quality was of government transport maintenance. Drammeh prepared a well-researched proposal and obtained support from the three key ministries prior to the Minister of Health submitting the proposal to the cabinet. Here is what she said about the process involved in submitting proposals to the cabinet:

"The Permanent Secretary (P.S.) feeds the Minister of Health with technical information. The Minister comes up with a policy plan. It's up to the P.S. to put that into a proper proposal, get the Minister's approval, and get the support of ministries. The Minister then sells it to the cabinet. Around June, the Minister of Finance asks ministries to submit draft budgets for the next financial year... The P.S. is at the head of the budget team... She leads the discussion of priorities... The proposal is then submitted to the Minister of Health, who will fold in his ideas. That proposal goes to the Ministry of Finance. Around October or November, the permanent secretaries are invited to the Ministry of Finance to defend their budget proposals. P.S.'s ask for more than they can usually have... You may get more if you can justify your submission, and you try to get any shortfalls through other development partners such as the WHO or UNICEF ... You may not get everything you need, but the door is not closed... If you direct development partners to programs that can benefit the people, they will respect it."

There were also several factors that contributed to the government approving the new TAM system in 2008.

First, the health ministry had become quite familiar with Riders over the years.

Second, the TAM financing structure with the Skoll Foundation's credit guarantee enabled Riders to offer the services of an entire fleet to the Gambian government for the first time.

Third, although Riders was supposed to perform demand servicing for the government's older fleet of vehicles and motorcycles starting in 2002, after the government ran out of funds,

Riders ended up operating at a loss (providing fuel, etc.) just to demonstrate a properly managed system. According to Drammeh, “The funds were not sufficient, but since we were getting proper cpk payment from the World Bank PHPNP project, we could survive...We did it to prove a point...Whether the government had money or not, we made sure ambulances worked and had sufficient fuel. Yes, you would say we were doing it as a calculated loss – we wanted government to see the difference between a properly managed system and a poorly managed system...And because of that, we were able to get the government to increase the budget from that very little amount in 2002 to, eventually, 12 million dalasis by the 2008 budget.”

Fourth, a former health minister, Dr. Mbowe, was heavily involved in formulating the idea for a country-wide fleet. Dr. Njie, the subsequent health minister, was also extremely supportive of the idea. Dr. Njie says, “If you look at the costs, it [TAM] is very effective. If you look at the benefits, it is also very effective.” Although Dr. Njie recognizes that government’s ability to pay is a large hurdle, he says “It just takes a health minister who is focused to put things together and get the resources. You should dig pieces of the budget out and piece them together to spend them more efficiently...People should start looking at the bigger picture...Think big and take everybody along. If you think small, you cannot get everybody on board.”

Fifth, Riders had been asked to manage vehicles for the Port Authority (a government organization) and Shell and to transport jet fuel to the airport, so a track record was established in another part of government as well as the private sector.

Finally, GT Bank had already provided a small loan to Riders in the past, so Riders had a credit history that made GT Bank amenable to thinking through the novel financing arrangement that involved the Skoll Foundation.

8. THE DIFFUSION POTENTIAL OF THE GAMBIA EXPERIENCE

As Riders works to expand its operations into other African countries, it considers entry strategies best-aligned with government (or other relevant health delivery partners’) wishes. For example, if an entity cannot yet commit the will or resources for a full-scale national TRM or TAM program, it may first conduct a pilot study in one region. Or, it may decide to offer a smaller-scale program such as a courier service for medical samples, which involves vehicle management and the employment of drivers/motorcycle riders for specialized blood and sputum sample delivery and collection. In order to obtain a national TAM contract such as the one with the Gambia, however, cabinet-level approval of a long-term contract is necessary. It is clear that personal connections among Riders staff and government officials played a significant role in the Gambia. These types of interconnections are not easily replicable in a larger country. However, there are other elements which could influence governments to consider Riders’ services. In this section we explore the constraints and opportunities involved with expanding TAM.

CONSTRAINTS

The first and largest challenge to replicating TAM is likely to be in securing the necessary levels of funding to purchase vehicles and pay for setup and infrastructure costs. Funding a sustainable outsourced leasing model like this is a different way for global health funders to allocate grants to African governments.

Second, while the Gambia TAM program benefited from Riders' long-standing reputation and track record working with the ministry, in a new territory where Riders has not yet built a working relationship a larger network of parties must be engaged to encourage a ministry to approve TAM.

Third, a hurdle to both TRM and TAM is that they involve a long-term contract commitment by the government. If a government is highly dependent on a mix of often variable internal revenues and donor funds, creating a long-term agreement for TRM or TAM involves a higher perceived degree of risk than requesting one-time vehicle donations and then finding a way to fund maintenance each year. Linked to this, is the attitude toward, and understanding of, outsourcing. While governments may outsource some non-core functions such as airport and sea-port management through public-private-partnerships, it is not yet common practice to outsource in the health sector in Africa.

Fourth, as is the case with any unmanaged system, those individuals who presently benefit from the freedom to use vehicles for personal purposes in an unregulated manner may not have the incentive to approve a system which puts restrictions on personal use.

Fifth, more evidence must be developed supporting the existing data on cost-effectiveness of the Riders system in comparison to unmanaged systems. Riders makes the case to governments that it runs vehicles for the longest possible time for the lowest possible cost. We discuss data available to date supporting the cost-effectiveness argument in the next section. What is clear is that using a cpk mechanism can enable governments to do more transparent budgeting and planning. The Zimbabwean government, for example, likes the cpk system because of its predictability and the fact that they see vehicles constantly running.

A final constraint to expanding TAM is the organizational shift into fleet management and fleet financing, which will affect the skills needed on staff. However, Riders is already driving this shift and bringing in and developing the necessary skills.



OPPORTUNITIES

First, once African ministries of health acknowledge that existing vehicle management systems do not consistently deliver strong performance, donor partners could coordinate with each other to advocate to a government the need for TAM. If a contract is secured, then, instead of donating physical vehicles to the government, they would ideally contribute to one pot of funding that could be used to pay the TAM cpk charge to Riders. Andrea Coleman says that today, in the Gambia, if a donor partner wants to donate a vehicle to the Ministry of Health, the Ministry will instead ask for money to fund the TAM program.

Second, governments should examine and understand their existing health transport budgets and actual expenditures. It may be that, as in the case of the Gambia, various budgets can be pooled to pay for a TAM system on some scale. When looking at the capital and expenditure

budgets for health transport maintenance, line items might exist for fuel in one place, for spare parts in a second, for vehicles in a third, and for driver salaries in yet another.

Third, the financing mechanism for a new fleet in another country could be modeled on the Gambian example. As the story of GT Bank's involvement becomes more known in the banking community, other African banks may be amenable to participating in such a scheme. As mentioned earlier, a funder would still be needed to provide a credit guarantee on the loan.

9. EXAMINING COST-EFFECTIVENESS

Some Ministry of Health staff persons have shared perceptions that the cost-per-kilometer (cpk) is too high for the TAM program. This highlights the fact that it remains a challenge to convince governments that TAM is the most cost-effective solution for quality health transport in the long term. In 2005 the international business consultancy OC&C carried out a pro-bono due diligence report on Riders for Health's activities in Africa¹⁷. In the report, it found that the estimated annual vehicle fleet maintenance cost per person treated per month by nurses at outreach clinics in the Gambia was 24% lower with Riders versus an unmanaged system. In Zimbabwe, annual motorcycle fleet maintenance costs per thousand people reached by health workers were 62% lower with Riders versus an unmanaged system. These estimates were partly based on assumptions (for example, based on interviews, they estimated that managed vehicles lasted 250,000 km versus unmanaged vehicles lasting 100,000 km) and did not use large-scale empirical data. Nevertheless, the figures are in line with the intuitive notion that the cost-effectiveness of a Riders system would be higher versus an unmanaged system.

Sometimes, as Andrea Coleman points out, difficulty arises because vehicles are donated to African countries and therefore the government is not aware of (or especially interested in) their cash value – it is not their money so the actual cost is not relevant to them. If or when they break down, the government feels no special sense of monetary loss. Also, since various transport maintenance costs may reside in different sections of the Ministry of Health budget, and record-keeping can be weak, it is not always clear what the total costs of vehicles and vehicle maintenance are. Compared to this system, Coleman says, “they see our bills and, without thinking behind the figures and comparing them to true status quo costs, they say ‘that’s high.’” However, she says, “How much does it cost you to lose a woman and a baby when an ambulance isn’t available [during obstructed labor]?”

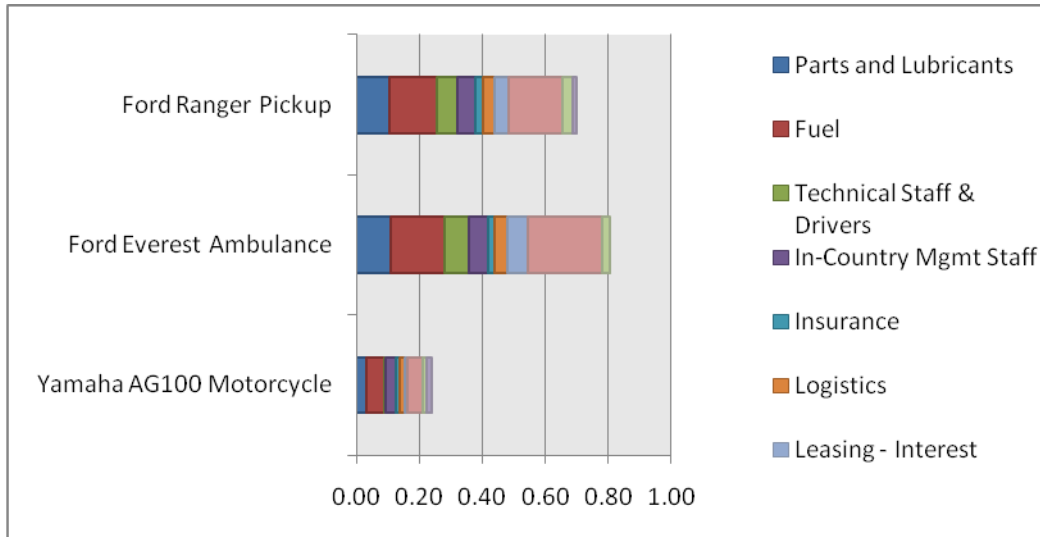
In fleet management, the standard measure of cost-effectiveness of a vehicle is the cost-per-kilometer. Under TRM in the Gambia, Riders charges \$0.182 per kilometer for motorcycles, and \$0.505 for ambulances. Under TAM, Riders charges \$0.241 for motorcycles, \$0.807 for ambulances and \$0.703 for trekking vehicles (the TAM charges are higher to reflect the principal and interest costs of the loan required to purchase the transport fleet). These cpk charges incorporate infrastructure and setup costs as well. As an indication of the cost-effectiveness of Riders, Barry Coleman cited one example in Zambia where he came across an unmanaged motorcycle that cost \$3,000 to purchase, and only ran 3,000 kilometers before breaking down. Accounting for fuel and other elements, this motorcycle's cpk was in effect over \$1.00 per kilometer, compared to the \$0.241 Riders charges for a TAM motorcycle in the Gambia. In Barry Coleman's experience, unmanaged motorcycles only last an average of eight months before having a major breakdown and most unmanaged vehicles last 12-15 months before breaking down.

Some of the key areas in which Riders believes it provides value over an unmanaged system include:

- *Reliability*: the goal of Riders is to have zero-breakdown in its motorcycles and vehicles as a result of a rigorous preventative maintenance system.
- *Usage control*: Under TRM and TAM, Riders charges users on a cpk basis and the government typically budgets for a total number of kilometers per month. This enables smooth budgeting, and clients are less likely to use vehicles for non-health related activities (i.e., personal use) because it would reduce the kilometers available in the budget for health activities.
- *Vehicle selection*: Under TAM (and ideally under TRM if Riders is able to influence the government's purchasing decisions), Riders selects appropriate vehicles based on conditions and purpose. For example, Riders may recommend using motorcycles in the place of vehicles if there are limited health workers that need to use the transport. Also, vehicles and motorcycles appropriate for hot, dusty, unpaved roads are selected.
- *Health worker productivity*: As highlighted in the OC&C report, one would expect annual maintenance costs per patient treated to be lower for Riders versus an unmanaged system.
- *Lower costs per kilometer*: Based on feedback from Riders, former Ministry of Health staff and others interviewed in the Gambia, unmanaged vehicle fleets have experienced a host of problems such as premature break downs and the resulting increase in parts and labor, more accidents due to lack of training, more transport replacement costs, lower total kilometers driven, etc. These factors combined with some of the value drivers mentioned in the bullet points above would suggest that Riders' full cpk would be lower than an unmanaged system.

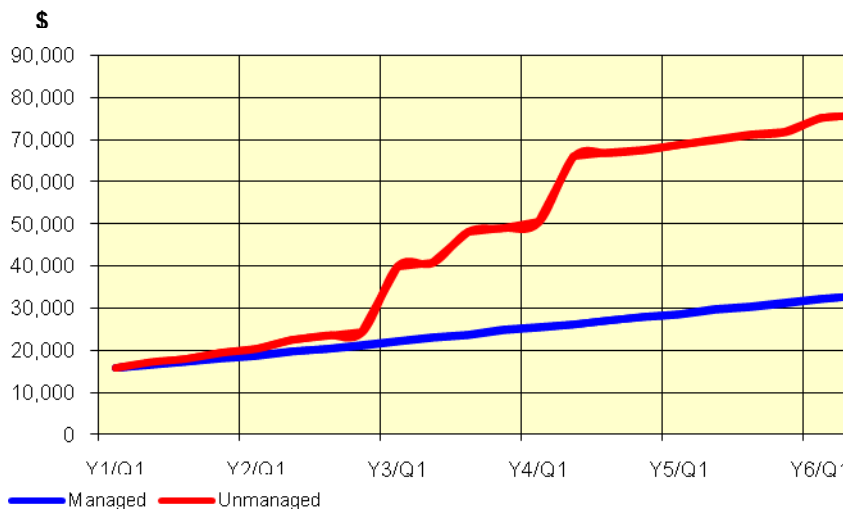
As an illustration of the types of costs involved in health transport maintenance, the components of Riders' cpk for each of the vehicle types under TAM (ambulance, trekking vehicle and motorcycle) in the Gambia are as follows:

EXHIBIT 6: RIDERS 2009 TAM CPK'S IN THE GAMBIA (IN USD)



The graph below was created by Riders for demonstrative purposes to highlight the cumulative costs of a Toyota Land Cruiser under a managed system versus an unmanaged system. While not based on actual data from an unmanaged vehicle (since it is difficult to obtain service records and costs for an actual unmanaged vehicle), Barry Coleman believes that industry experts would agree that the types and frequency of breakdowns indicated here for an unmanaged vehicle are in line with reality. Riders conservatively assumes that no breakdowns occur in the unmanaged vehicle for the first two years, and that the vehicle doesn't altogether break down during the six year period shown in the graph.

EXHIBIT 7: EXAMPLE - CUMULATIVE COSTS FOR UNMANAGED VS. MANAGED VEHICLE



The data described in this section and other analysis conducted to date, while pointing to Riders' cost-effectiveness, is not comprehensive enough to make the definitive case that Riders

offers a more efficient solution than an unmanaged system. In November 2008, the Gates Foundation awarded Riders a grant to strengthen the evidence base that its services provide high, cost-effective impact. The grant is also enabling Riders to scale up operations and test further variants of its business models. The Stanford University Global Supply Chain Management Forum is partnering with Riders to evaluate the impact of vehicle management models on health systems and equitable technology uptake. The evaluation will focus on logistics efficiencies, health worker productivity and health intervention coverage. With Stanford, Riders plans to examine the actual cpk of its system versus an unmanaged system. Furthermore, the evaluation will analyze annual fleet maintenance costs compared to health benefits such as the number of patient visits and coverage of health interventions to gauge the cost-effectiveness of various logistics and health productivity indicators¹⁸.

10. CONCLUSION

In the last twenty years, Andrea and Barry Coleman have consistently grown Riders for Health and expanded its reach. Throughout this time, the Gambia has acted as a laboratory for testing ideas that can, and are, raising the bar for health transport maintenance in Africa. When taking a step back and reflecting upon the TAM program thus far, Andrea Coleman points out how unusual it is for a relatively small nonprofit organization to have a contract with a national ministry. She says, “We don’t know of many social enterprises of our size that are working directly with ministries of health, except perhaps Partners in Health.” As Riders looks to further expand TAM into other African countries, it will apply lessons learned from the Gambia experience, and will be collecting evidence of its impact along the way. The Gambian TAM story involved the commitment and diligence of technicians, the persistence and creativity of Riders’ management, especially of Barry and Andrea Coleman, the foresight and realistic approach to the need for managed transport of funders and of the Gambian government. Lacking elements of this extended network would perhaps have prevented Riders from getting to where it is today — poised to expand high-quality health transport maintenance, and in turn, increase the equity and volume of health interventions delivered in Africa in the future.

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11. APPENDICES

APPENDIX A: COMPARISON OF TRANSPORT MODELS

	No Riders	Interval Service	Transport Resource Management	Transport Asset Management
Worker/ driver training	Does not exist	Inconsistent	Strong	Strong
Fuel availability	Inconsistent	Inconsistent	Strong	Strong
Spare parts availability	Inconsistent & questionable quality	Inconsistent	Strong	Strongest (parts are standardized)
Misuse of vehicles	High	High	Low	Lowest
Vehicle resale value	Lowest	Low	Moderate	Highest
Vehicle useful life	Low	Medium	High	High
Km/year	High	High	Medium	Low
Cost control	Weak	Weak	Strong	Strongest
Payment scheme	Self-funded by govt. or govt. pays a private organization per service	Per service and per training payment to Riders	Cpk payment to Riders	Same cpk components as TRM, plus loan principal & interest added in
Vehicle Liability	Client	Client	Client	Riders for Health

APPENDIX B: HEALTH TRANSPORT MAINTENANCE COSTS INCLUDED IN RIDERS' CHARGES

	Interval Servicing	TRM	TAM
Interventions (Parts and Lubricants)	x	x	x
Training		x	x
Fuel		x	x
Direct Staff (Technical Staff and Drivers)	x	x	x
Direct Management (Gambia Management Staff)	x	x	x
Insurance		x	x
Logistics		x	x
Vehicle purchase cost			x
Vehicle loan interest cost			x

*APPENDIX C: KEY FACTS AND FIGURES*¹⁹

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Vehicles	129	Not avail.	123	103	109	95	105	101	94	52 Dem. Svc., 63 TAM
Motor-cycles	Not avail.	Not avail.	Not avail.	107 Dem. Svc., 50 TRM	Not avail.	Not avail.	153	Not avail.	Not avail.	89 Dem. Svc., 90 TAM
Health Transport Spending ('000s)	\$360	\$223	\$296	\$300	\$393	\$416	\$456	\$615	\$729	\$899 (budget)
Total Health Spending ('000s)	\$6,943	\$5,959	\$10,331	\$9,773	\$1,921	\$5,143	\$6,080	\$10,138	\$12,106	\$10,891 (budget)
Total Nat'l Spending ('000s)	\$73,495	\$69,025	\$62,801	\$84,877	\$96,270	\$97,621	\$105,893	\$121,343	\$152,072	\$217,715 (budget)

APPENDIX D: NATIONAL BUDGET OF THE GAMBIA
** (in '000,000 Gambian Dalasi)*

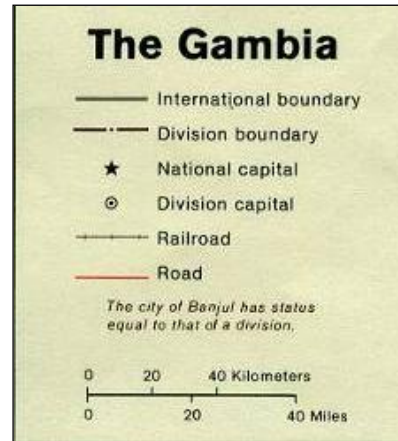
	2008	2009
Office of President	211.61	265.76
DOS Basic & Secondary Education	660.41	839.75
DOS Health & Social Welfare	254.44	290.84
DOS Finance and Economic Affairs	618.81	498.59
DOS Works, Construction and Infrastructure	938.53	848.39
DOS Foreign Affairs	217.70	286.49
DOS Interior	211.70	214.77
DOS Agriculture	213.88	265.18
DOS Defense	380.90	189.05
Debt Service Charges	1,237.00	1,148.62
Others	928.14	965.47
TOTAL	5,873.12	5,812.91
<i>Riders for Health Allocation</i>	12.0**	29.0***

* *Source: Gambia Ministry of Finance Annual Budget Books*

** *Original budget was 9 million dalasi in 2008, but subsequently increased to 12 million dalasi per Riders staff*

*** *Riders had requested 48 million dalasi for the TAM program in 2009, but secured 29 million*

APPENDIX E: MAPS OF THE GAMBIA²⁰



APPENDIX F: INDIVIDUALS INTERVIEWED

- Karamo Bojang, Administrative Director – Riders for Health (the Gambia)
- Ali Ceesay, Deputy Program Director 1 – Riders for Health (the Gambia)
- Andrea Coleman, Chief Executive Officer and co-founder – Riders for Health (United Kingdom)
- Barry Coleman, Executive Director and co-founder – Riders for Health (United Kingdom)
- Ed Diener, General Counsel – The Skoll Foundation
- Therese Drammeh, Program Director – Riders for Health (the Gambia)
- Omar Jah, Operations Director – Riders for Health (the Gambia)
- Lamin Jarjusey, Finance Manager – Riders for Health (the Gambia)
- Dawda Joof, Former Manager of World Bank PHPNP program in the Gambia (Currently Programme Officer, CIAM - Public Health Research & Development Centre)
- Oman Khan, Governor – Upper River Region of the Gambia
- Dr. Tamsir Mbowe, Former Minister of Health, the Gambia
- Dr. Malick Njie, Former Minister of Health, the Gambia
- Western Regional Health Team in the Gambia: various staff including Abi Khan - the officer-in-charge, Alhaji Sankareh - the administrator, a senior community health nurse, and a regional health education officer
- Olalekan Sanusi, Managing Director – GT Bank
- Mike Saxton, Chief Operating Officer – Riders for Health (United Kingdom)
- Alieu Sonko, Officer in Charge – Brikama Health Center
- Ganyi Touray, Governor – Central River Region of the Gambia

¹ A public-private partnership is a contractual agreement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public. In addition to the sharing of resources, each party shares in the risks and rewards potential in the delivery of the service and/or facility. *The United States-based National Council of Public Private Partnerships*. www.ncppp.org.

² "Riders for Health - A proposal for a sustainable platform to mobilize health care services in Africa – Asset Management (Leasing) Business Case. Phase One: the Gambia", pg 10

³ Same report as above, pg 4

⁴ Riders' TAM programme in the Gambia – Update and brief overview, March 2009, by Therese Drammeh

⁵ Unless otherwise noted, information in this section was obtained from "The World Factbook 2008", <https://www.cia.gov/library/publications/the-world-factbook/geos/GA.html> (July 6, 2009)

⁶ <http://www.britannica.com/EBchecked/topic/224771/The-Gambia/279031/History#ref=ref516699> (July 6, 2009)

⁷ Information provided by Riders for Health Gambia staff.

⁸ <http://hdr.undp.org/en/statistics/> (July 6, 2009)

⁹ <http://hdr.undp.org/en/statistics/data/hdi2008/> (July 9, 2009)

¹⁰ PPP, or Purchasing Power Parity, is the exchange rate that equates the price of a basket of identical traded goods and services in two countries.

<http://www.economist.com/research/Economics/alphabetic.cfm?term=purchasingpowerparity#purchasingpowerparity> (July 6, 2009)

¹¹ http://hdr.undp.org/en/media/HDR_20072008_EN_Complete.pdf (July 6, 2009)

¹² http://www.transparency.org/news_room/in_focus/2008/cpi2008/cpi_2008_table (July 6, 2009)

¹³ Interview with Alieu Sonko, Officer in Charge at Birkam Health Center, the Gambia (June 12, 2009)

¹⁴ Much of this history was collected from interviews with Ali Ceesay and Therese Drammeh on June 8, 2009.

¹⁵ Brian Tayan and Hau Lee, "Riders for Health: Health Care Distribution Solutions in Sub-Saharan Africa", Case GS-58, Stanford Graduate School of Business, November 26, 2007.

¹⁶ A social enterprise is an organization that harnesses the power of the marketplace to solve critical social or environmental problems. *United States-based Social Enterprise Alliance*. www.se-alliance.org.

¹⁷ <http://www.riders.org/downloads/OC&C%20report.pdf>

¹⁸ Riders for Health Evaluation Plan – In Partial Fulfillment of Bill and Melinda Gates Foundation Grant "Riders for Health's Demonstration of Effectiveness and Efficiency of Contracting Out Vehicle Fleet Management for Health Delivery". Hau L. Lee, Lesley Sept, Sonali Rammohan

¹⁹ Gambian Dalasi to US Dollar exchange rates obtained from <http://www.who.int/nha/country/GMB.pdf> (for 2000-2005) and <http://www.gocurrency.com> (for 2006-2009, used Dec. 31 rates)

²⁰ <http://www.lib.utexas.edu/maps/gambia.html> - produced by the U.S. Central Intelligence Agency, 1988

Photo credits: Tom Oldham photography, on behalf of Riders for Health. Sonali Rammohan on behalf of Stanford University.