

riders



THE GAMBIA

Sustainability, accountability, partnerships: Experience from Riders for Health



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Cause of Death	Cure/Prevention	SSA Multiple of UK Incidences	SSA Deaths pa, ('000s)	Ease of Prevention
Malaria	<ul style="list-style-type: none"> ◆ Mosquito nets ◆ Insect repellent ◆ Early diagnosis and prompt treatment ◆ House residual spraying 	NA	901	4
Maternal Mortality	<ul style="list-style-type: none"> ◆ Access to trained health worker ◆ Access to emergency care in the case of complication 	72.3	265	4
Cholera	<ul style="list-style-type: none"> ◆ Clean water ◆ Adequate sanitation ◆ Vaccination ◆ Oral rehydration solution 	609.7	2	4
Diarrhoea	<ul style="list-style-type: none"> ◆ Clean water ◆ Oral rehydration solution ◆ Adequate sanitation 	NA	NA	4
HIV/AIDS	<ul style="list-style-type: none"> ◆ Education about HIV / AIDS ◆ Distribution of condoms ◆ Distribution of clean needles 	41.5	2.200	3
Tuberculosis	<ul style="list-style-type: none"> ◆ Vaccination (BCG) 	30.1	897	3

1=difficult to prevent
4=easy to prevent

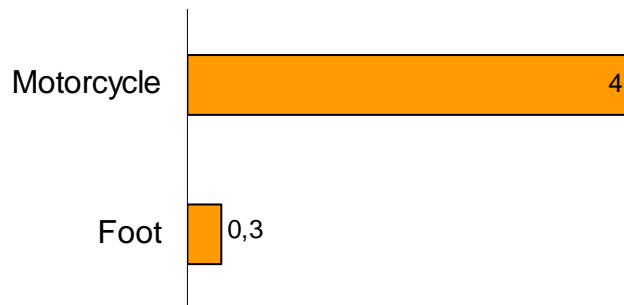
The assumption that guides the strategic plan and underlines Riders' vision and mission is that many deaths occurring in SSA rural areas could be easily prevented by our health care partners once they are able to effectively distribute basic health education and the distribution of well known remedies.

Source: WHO, Interviews, WRI, UNAIDS, OC&C analysis

'000 population covered by one health worker per year in Zimbabwe by mode of transport

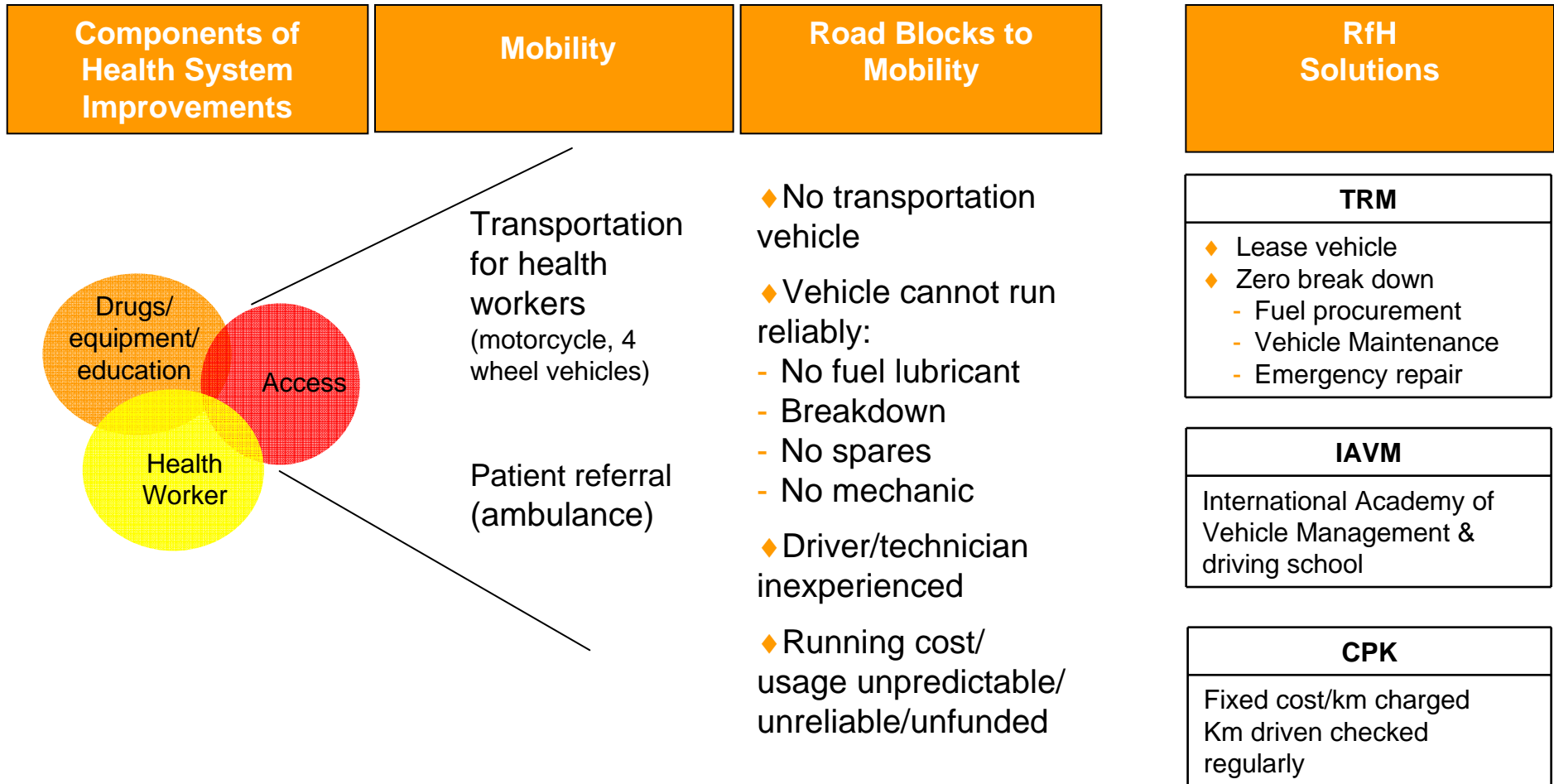


Monthly frequency of visit by health worker in Zimbabwe by mode of transport



Health workers provided with transportation vehicles (motorcycles) reach more rural people and increase frequency of visits

Source: OC&C analysis



2 WHEELS (HONDA XL 125)

4 WHEELS (NISSAN DOUBLE CAB)

COST

- Capital cost	2,550	26,000
- CPK (TRM)	0.18	0.44
- CPK (Full leasing)	0.23	0.93

ACCESS

- Motorcycle can reach villages connected only by foot/animal paths.
- Motorcycles operate longer in rainy seasons.
- Motorcycles can cross rivers on a small boat.

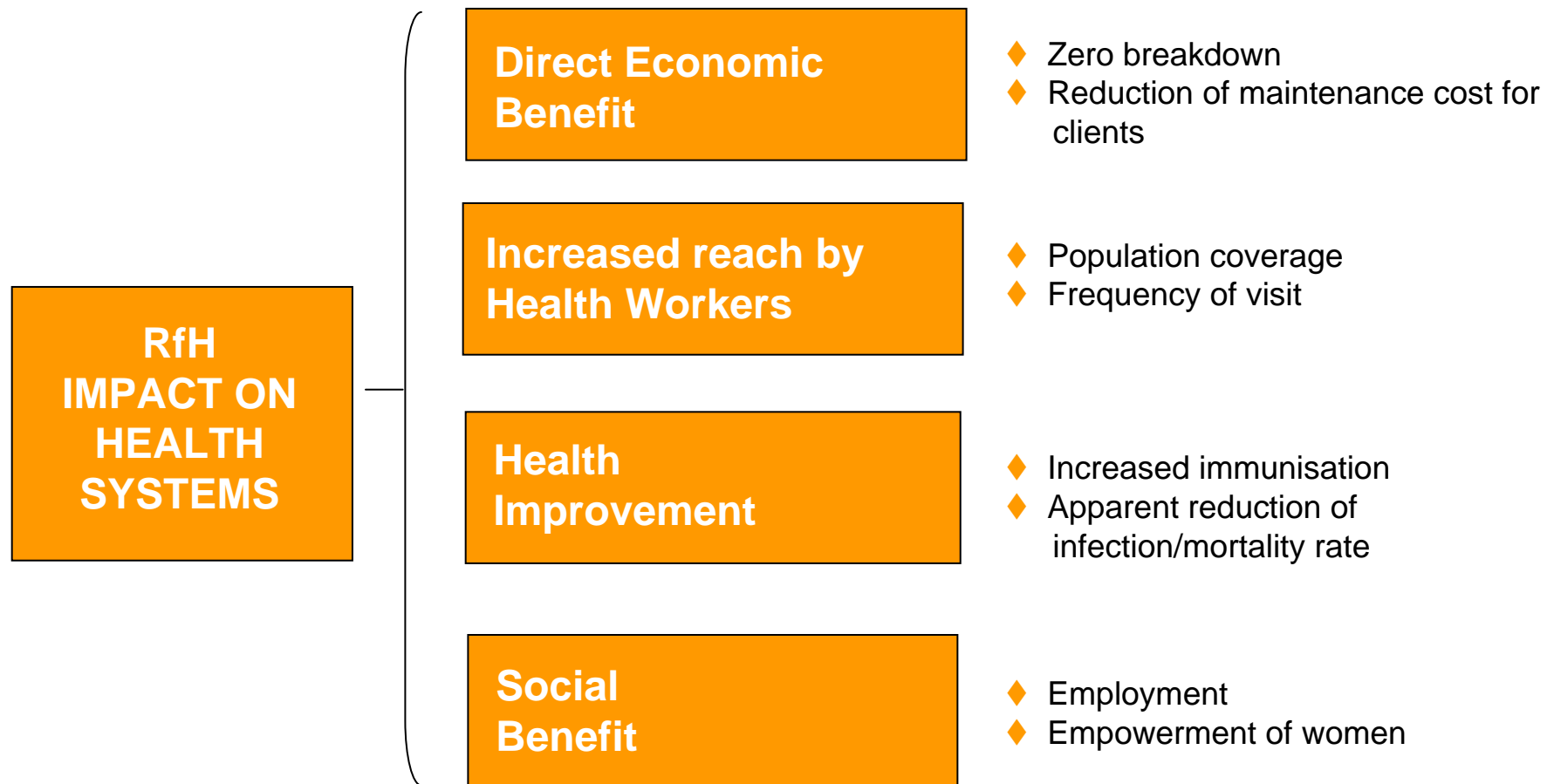
- Cannot operate on very narrow or very steep paths.

SOCIO-LOGICAL

- Motorcycle riders are more accessible to communities.
- Motorcycle friendly with women riders.

- Cars often considered a status symbol.
- Local bureaucrats often commandeered cars for their personal use.

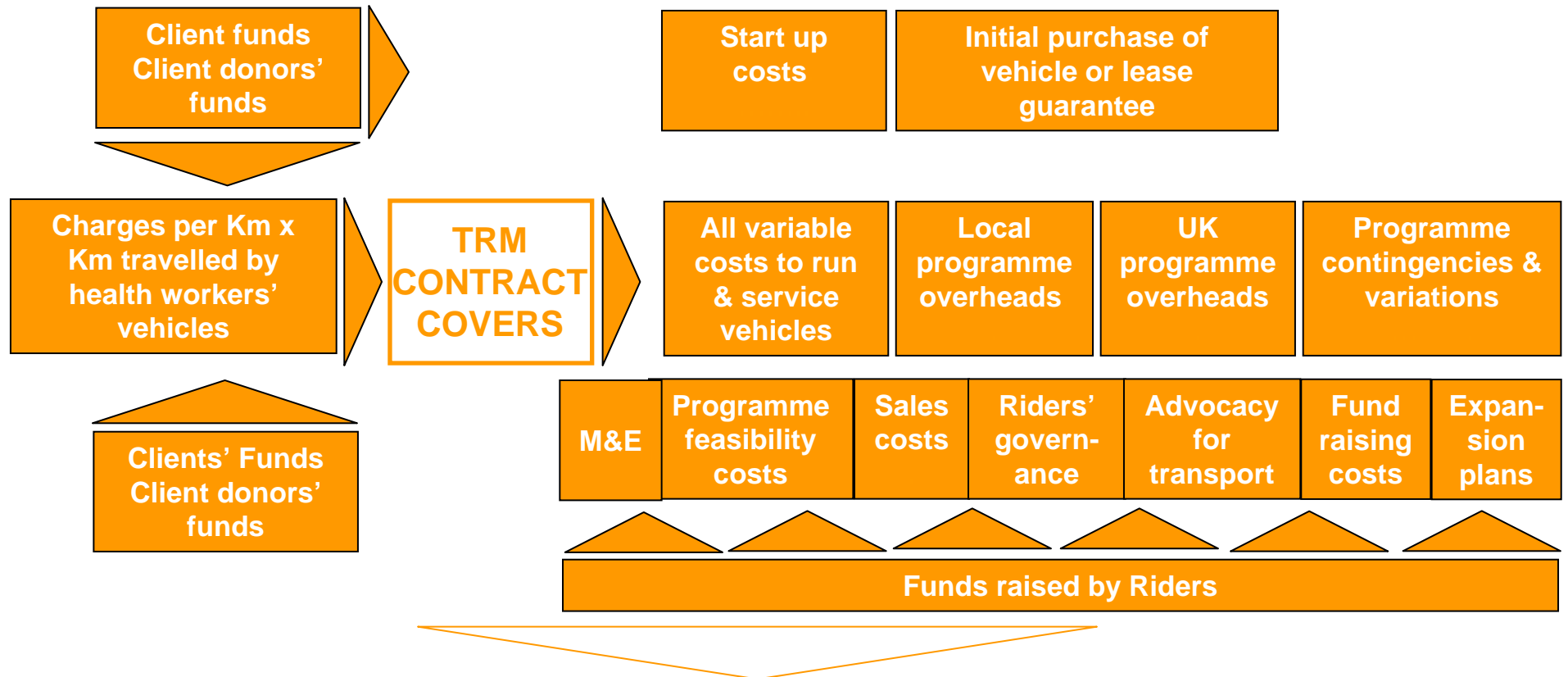
Riders favours the use of 2 wheelers (motorcycles) for cost, accessibility and sociological reasons.



Independent assessment/measurement testifies that RfH delivered on its promises and had a positive impact on the community and on health systems.

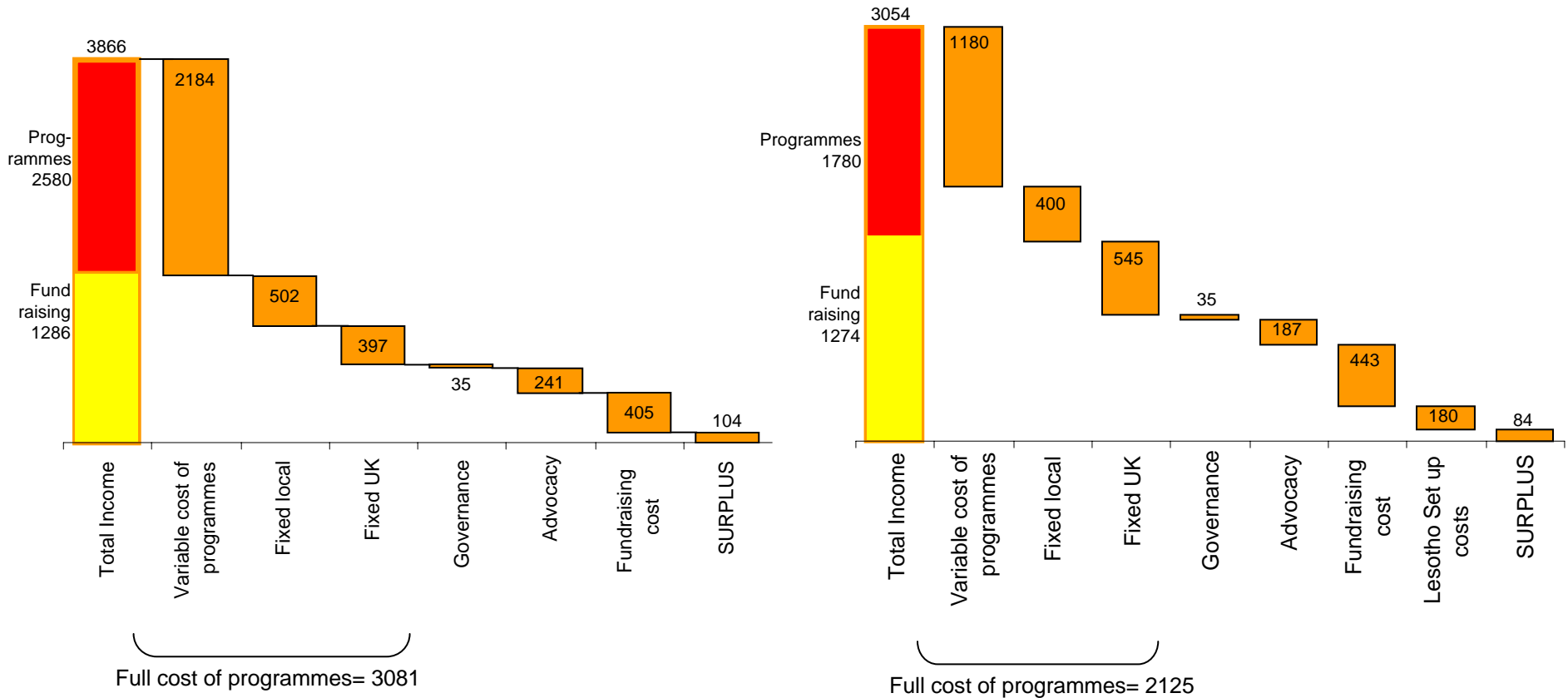
Business System

Theoretical Cost/Revenues Flow

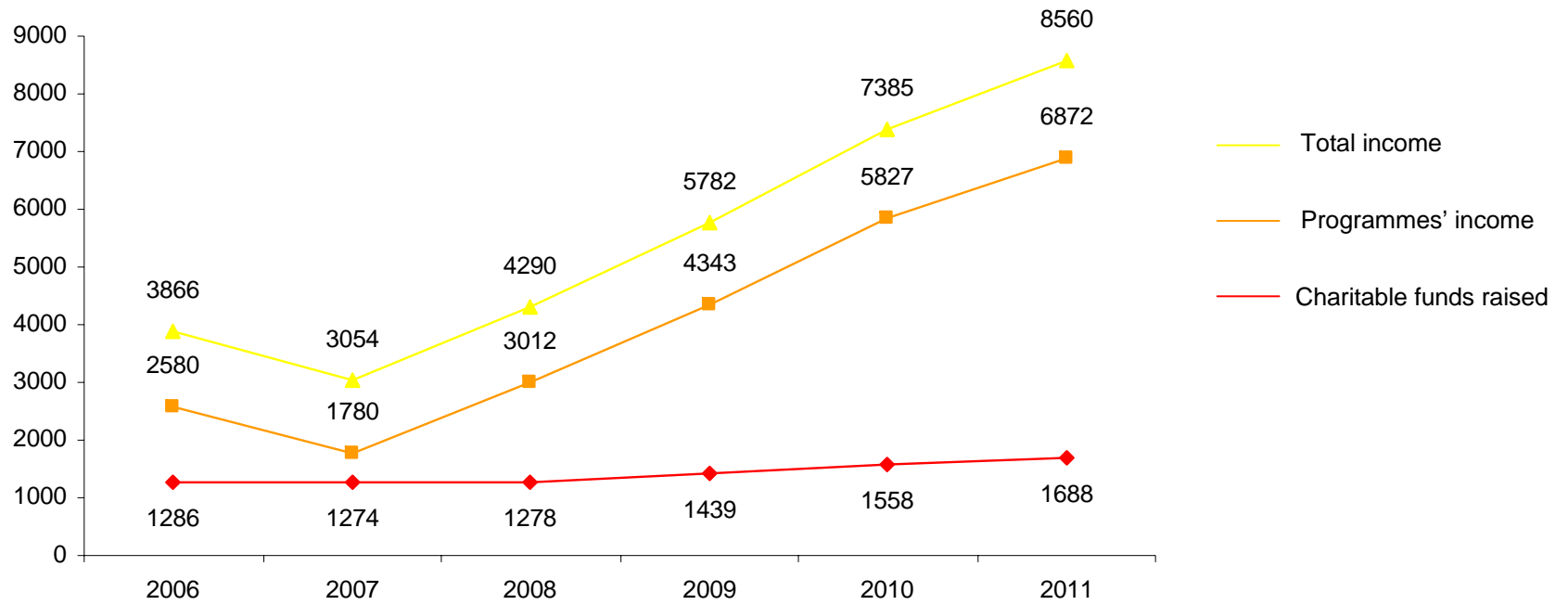


- ◆ RfH business system is centred on a service contract (TRM) paid by RfH clients on a cost/km basis. Cost/km (CPK) are analytically calculated to cover all RfH costs directly or indirectly associated with the managing of clients' fleet.
- ◆ Cost for initial/purchase replacement of vehicles, specific programme start up costs and all non transportation costs are incurred by client with no recourse to RfH.
- ◆ All advocacy, governance, sales, feasibility costs are covered directly by Riders through their net funds raised.

(£000)

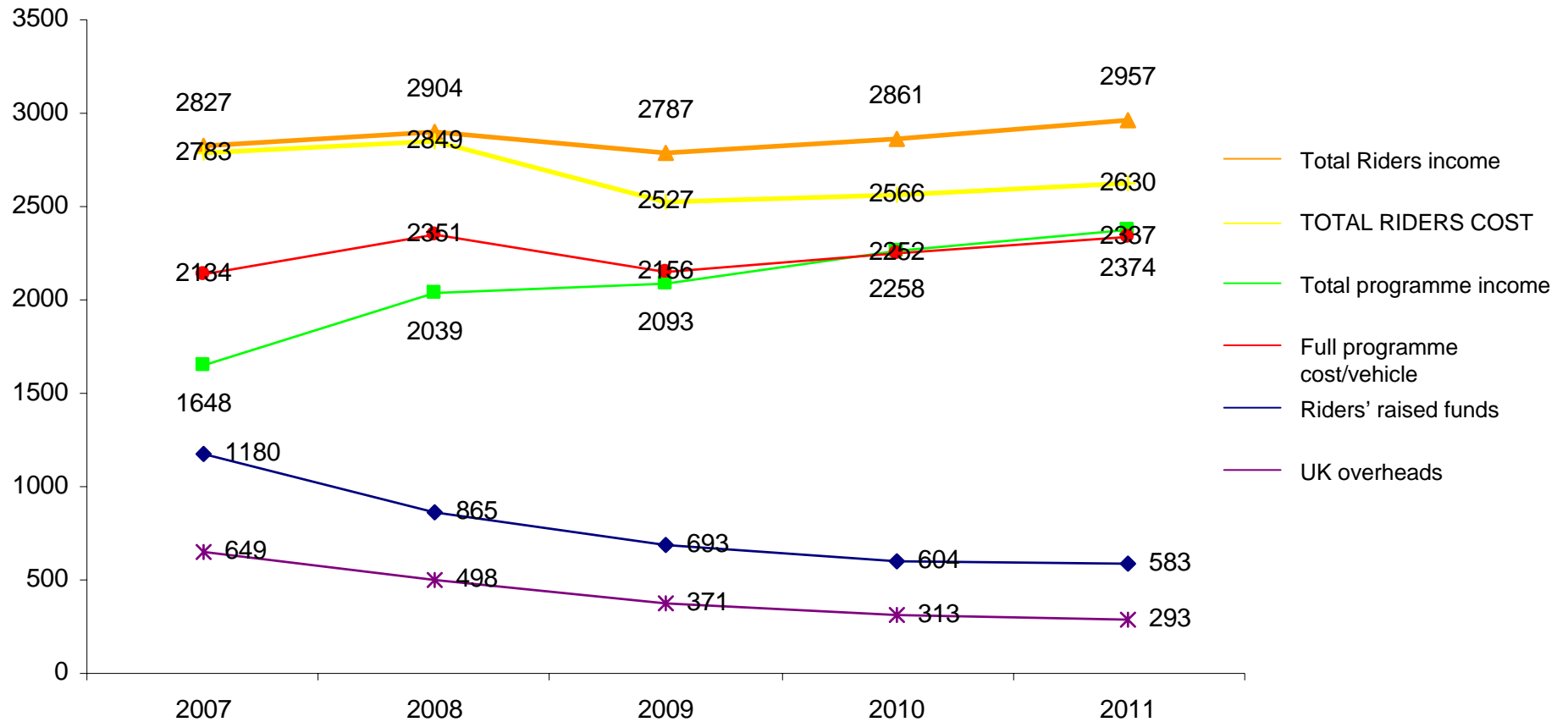


Even in the last two difficult years Riders' business system was self sustaining. Whenever contracts were in place, their income paid almost for their full cost. The marginal deficit was covered by Riders' own funds that also paid for governance, advocacy and in 2007 expansion set up in Lesotho.



Programme acquisition, (increase of vehicles under management and increase in programme income) is the key variable for the strategic plan base case success. Any shortfall in the programme area is unlikely to be compensated by charitable income expected development.

(Average per vehicle)



Acquisition of programmes that cover their full cost is essential for the success of the strategic plan.

2 wheeled vehicle

Area of expenditure	CPK (\$)
Parts costs	0.029
Fuel	0.041
Direct staffing (driver and technicians)	0.016
Direct management	0.038
Logistics	0.020
Contingency	0.014
Insurance	0.02
TRM Total	0.178

4 wheeled vehicle

Area of expenditure	CPK (\$)
Parts costs	0.154
Fuel	0.105
Direct staffing (driver and technicians)	0.052
Direct management	0.064
Logistics	0.040
Contingency	0.005
Insurance	0.020
TRM Total	0.440

Component	Component details	Costs based upon	Total cost to vehicle	Component CPK calculation (for each vehicle type)
<i>Interventions (parts and tyres)</i>	Regular parts/tyres required, plus forecasted 'incidental' interventions	Price lists from current suppliers	Interventions * cost of interventions = total parts cost	Total parts cost / forecast annual distance travelled per vehicle
<i>Fuel</i>	Ongoing fuelling for vehicles; with fuel efficiency adjusted as vehicle ages	Current fuel costs (per litre)	Cost per litre * forecast distance travelled / fuel efficiency	Total fuel cost to vehicle / forecast distance travelled per vehicle
<i>Direct Staffing</i>	Staffing costs that vary directly as result of # vehicles being managed ¹	Field data for drivers and technicians needed	Technician salary / # vehicles each technician can manage + driver salary ²	Total direct staffing cost to vehicle / forecast distance travelled per vehicle
<i>Direct Management</i>	Direct costs of running the vehicle maintenance and management operation	Includes: premises costs; Riders' own vehicle costs; travel and subsistence; office running costs; training costs	Total overhead costs * weighted allocation per vehicle type / # of vehicles within type	(Total overhead costs * weighted allocation per vehicle type) / (# of vehicle type * forecast distance travelled per vehicle)
<i>Insurance</i>	Fully comprehensive vehicle insurance cover.	Quotes from vehicle insurers	Total insurance costs/ # of vehicles within type	Total insurance costs/ # of vehicles within type * forecast distance travelled per vehicle
<i>Logistics</i>	Support costs from UK office	Includes: Share of administrative support and oversight from the UK office	Programme share of UK costs * weighted allocation per vehicle type / # of vehicles within type	(Programme share of UK costs * weighted allocation per vehicle type) / (# of vehicle type * forecast distance travelled per vehicle)
<i>Contingency</i>	To cover unforeseen costs due to innovative nature of the programme.	X% of operational vehicle costs	X% operational vehicle costs / # of vehicles within type	X% operational vehicle costs / # of vehicles within type * forecast distance travelled per vehicle
<i>Leasing Costs</i>	Capital repayment and interest payments	Deal structure with lender	(Capital cost of vehicle – Resale value) + (Initial borrowing ³ * interest rate over life of repayment)	(Capital cost of vehicle – Resale value) + (Initial borrowing * Annual interest rate) / (forecast distance travelled per vehicle, per year)

¹ For example, for each additional ambulance an additional driver will be required, but five new ambulances can be provided without increasing the number of finance staff required. Growth that necessitates additional support staff is accounted for through the direct management cost area.

² Technicians can manage multiple vehicles, while the driver:vehicle ratio is 1:1

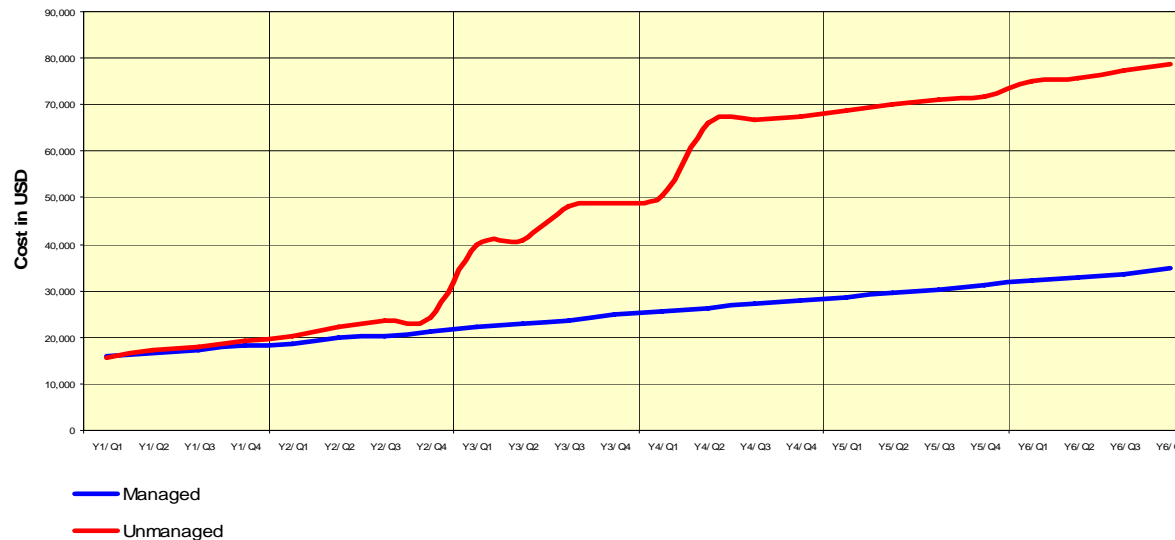
³ Initial borrowing assumed to equal capital cost of the vehicle unless additional sources of funding are utilised.

Analytical CPK Calculation

	A	B	C	D	E	F	G	H	I
1	Country								
2									
3									
4	Partner								
5									
6									
7	Number of vehicles	Notes	0 > 50k	50k > 100k	100k > 150k	150k > 200k	200k > 250k	250k > 300k	Totals
8	NDC diesel with oil filter		0	2	13	16	3		34
9	NDC diesel without oil filter		11	11	7	15	18		62
10	TLC diesel		2	1	0	1	2		6
11	TLC petrol		0	0	0	0	4		4
12	THL diesel		0						0
13	NPT diesel		0	0	0	2	0		2
14	Totals		13	14	20	34	27	0	108
15									
16									
17	Estimated number of kilometres per vehicle per month	1	3,000						
18									
19									
20									
21	Exchange rates	2	131.20	NGN to USD					
22									
23			0.54855	GBP to USD					
24									
25									
26	Cost per kilometre		USD	%					
27	Interventions	3	0.16109	41%					
28	Tyres		0.02082	5%					
29	Fuel	4	0.06803	17%					
30	Direct management	5	0.09242	24%					
31	Logistics	6	0.04641	12%					
32	Total		0.38875	100%					
33									
34	Cost per kilometre		39 US cents						

The cost of poor management

Comparison of the cumulative cost per vehicle for managed and unmanaged systems for delivering health interventions in Africa.



- **The red line shows that cost-control is impossible**
- **The blue line shows that with the Riders system zero-breakdown performance can be achieved through planned preventive maintenance, resulting in:**
 - Excellent cost control
 - Enhanced budgeting
 - Improved planning capacity
 - Good programme management













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