



RoadSide Stations (RSS)

Northern Corridor
RSSs in **Rwanda**.

PROJECT INFORMATION PAPER



www.roadsidestations.org



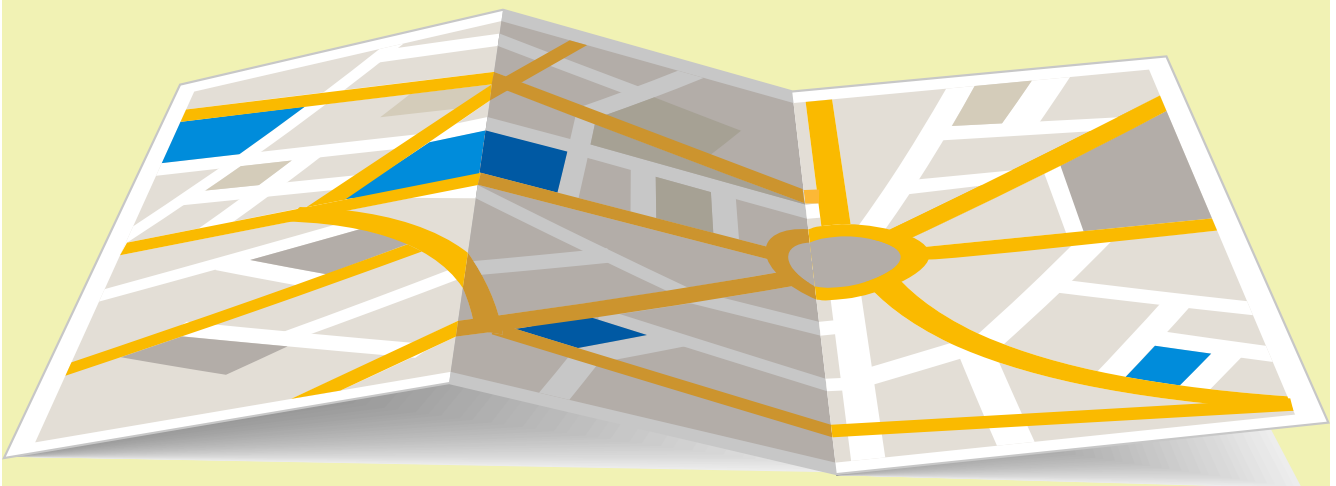
Northern Corridor
Transit and Transport
Coordination Authority

Contents

RoadSide stations pg. 1

Rwanda Northern
Corridor Transport
Infrastructure Network pg. 2

RSSs in Rwanda pg. 4 - 17

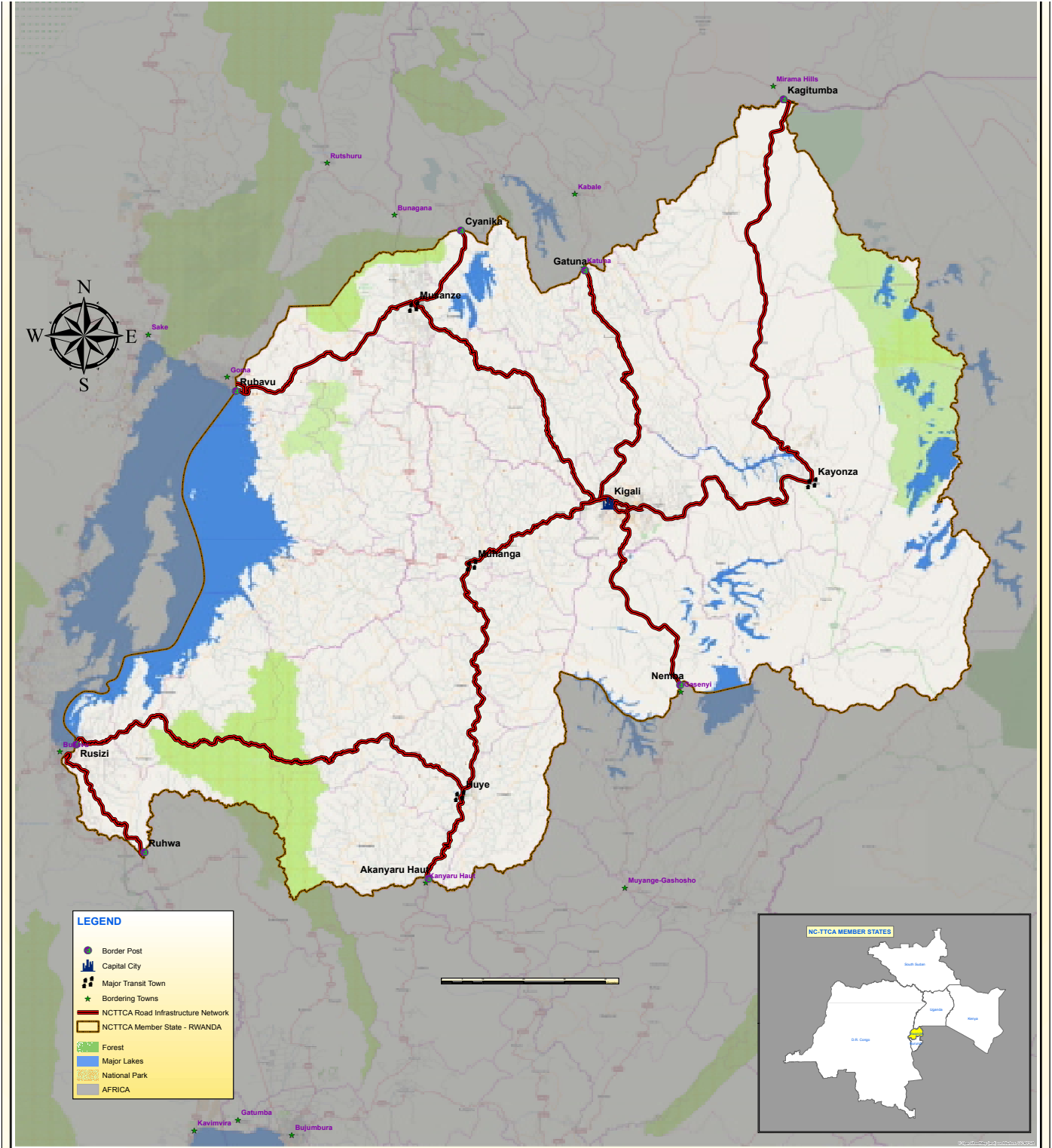


RoadSide Stations

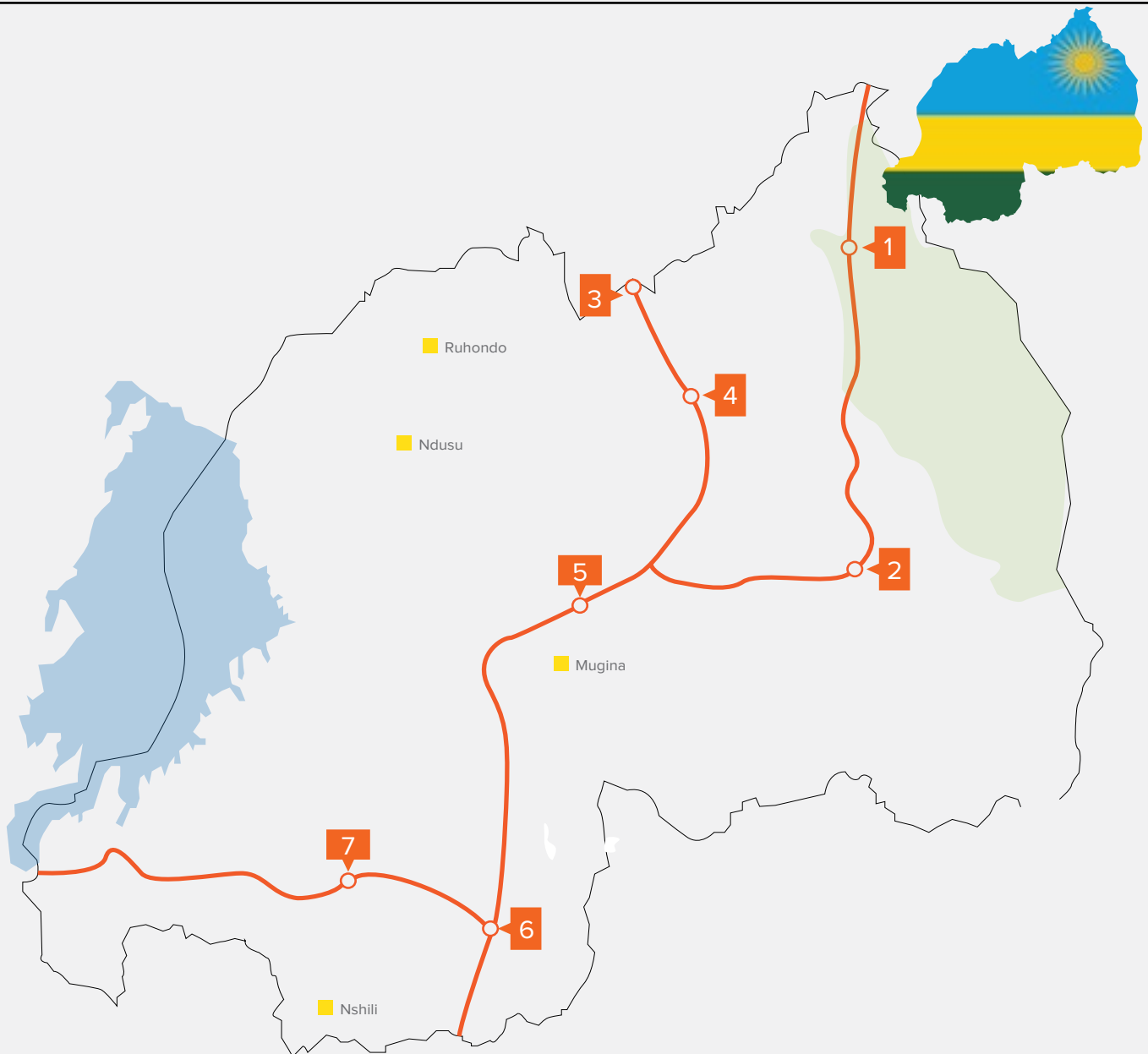
The Project Information Paper highlights the following information:

- > Traffic foreseen in the area of the RSS
- > Number of vehicles stopping in the RSS
- > Number of users per day
- > Average time parked in the RSS
- > Map of location in the corridor
- > Design scheme
- > Investment cost
- > Maintenance and operating cost
- > Global financial feasibility
- > Sponsors financial return
- > Solvency/Bankability
- > Weighted Average Cost of Capital (WACC), Debt
- > Summary of Financing Potential
- > Financial Cash Flow (FCF)
- > Equity cash flows

Rwanda Northern Corridor Transport Infrastructure Network



RoadSide Stations in Rwanda



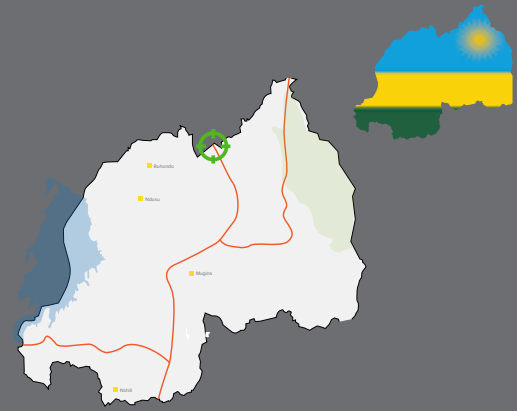
1. Ryabega
2. Rugende
3. Rukomo

4. Nyacyonga
5. Ruhango
6. Huye

7. Kitabi



Rukomo RoadSide Station



Proposed Amenities

1. Service station
2. Shops
3. Washrooms
4. Restaurant
5. Health clinic
6. Bank
7. Bar
8. Hotel
9. Public information area/Administrative offices
10. Truck repair
11. Truck parking
12. Pedestrian and green areas
13. Green areas

Proposed Design



Vehicle Statistics

Passenger Cars



685

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	2
Number of users per day	0
Average length of time parked (hours) per vehicle	0.5

Minibuses



257

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	10
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Large Buses



94

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	30
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Trucks



290

Number of Vehicles Stopping Daily	43
Average Number of Passengers per Vehicle	2
Number of users per day	87
Average length of time parked (hours) per vehicle	1

Estimated Investment Cost

Investment Cost (US \$)

1,097,723

Maintenance and Operating Cost (US\$/Yr)

29,494

Global Financial Feasibility

FNPV

-1.29 Mill. US\$

FIRR

--%

Disc. P/B period

--

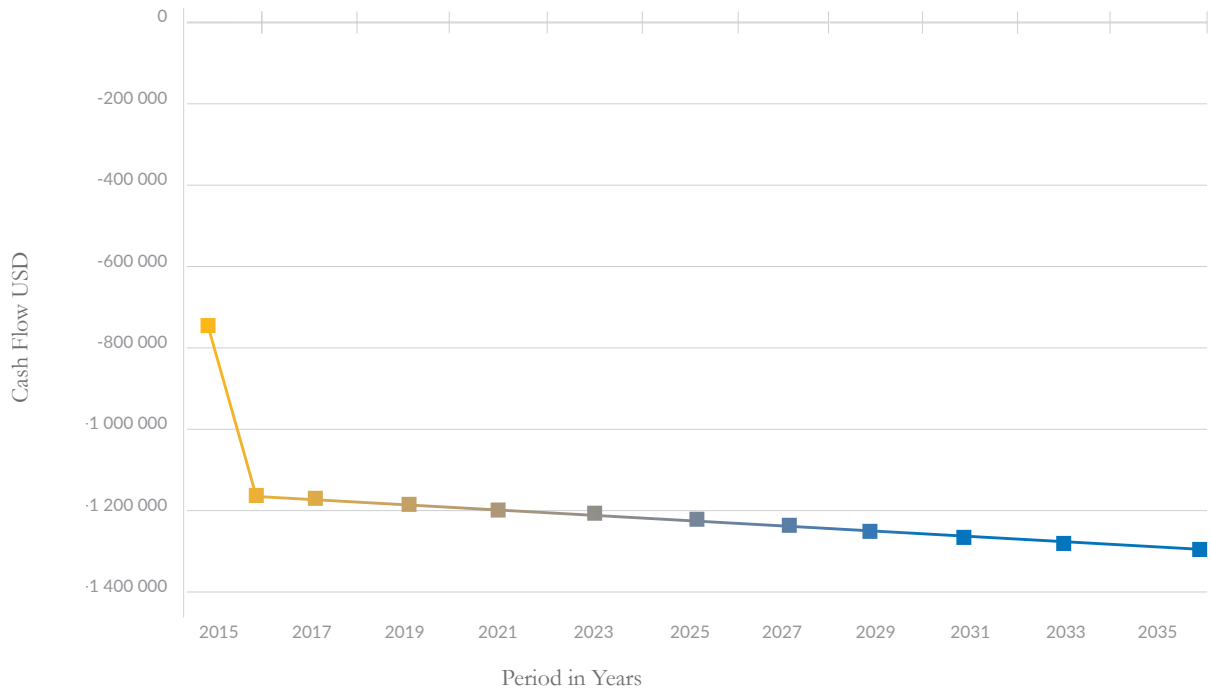
Summary

LOW PRIVATE
Financing Potential

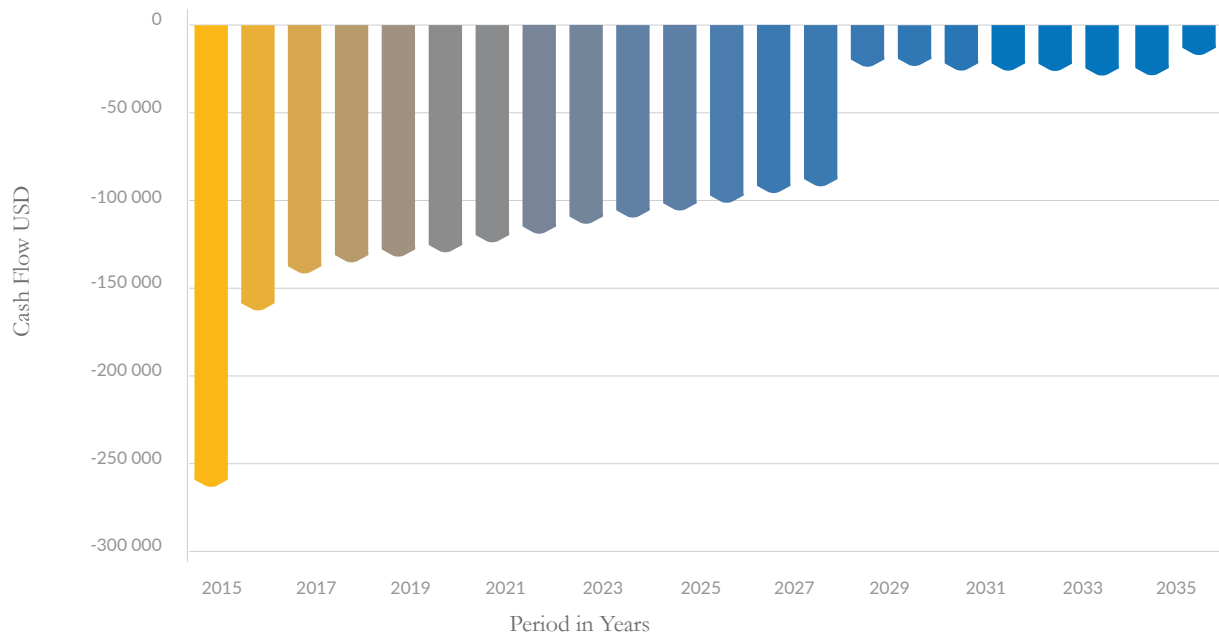
Rukomo

RoadSide Station

Financial Cash Flow | Value Creation



Equity Cash Flow



Sponsors Financial Return

Equity FIRR

--

Solvency/Bankability

DSCR 5/yr

-0.1

General Assumptions

WACC Rate

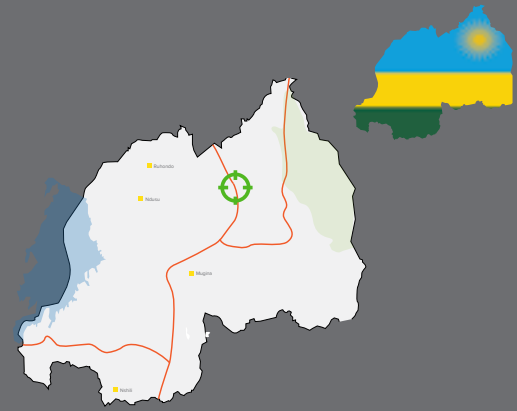
8.19%

Cost of capital (ke)

11.5%



Nyacyonga RoadSide Station



Proposed Amenities

1. Service station
2. Shops
3. Washrooms
4. Bureau office
5. Restaurant
6. Hotel
7. Truck repair
8. Bar
9. Truck parking
10. Pedestrian and green areas
11. Green areas

Proposed Design



Vehicle Statistics

Passenger Cars



709

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	2
Number of users per day	0
Average length of time parked (hours) per vehicle	0.5

Minibuses



257

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	10
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Large Buses



56

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	30
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Trucks



322

Number of Vehicles Stopping Daily	80
Average Number of Passengers per Vehicle	2
Number of users per day	161
Average length of time parked (hours) per vehicle	1

Estimated Investment Cost

Investment Cost (US \$)

722,533

Maintenance and Operating Cost (US\$/Yr)

26,774

Global Financial Feasibility

FNPV

-0.85 Mill. US\$

FIRR

--%

Disc. P/B period

--

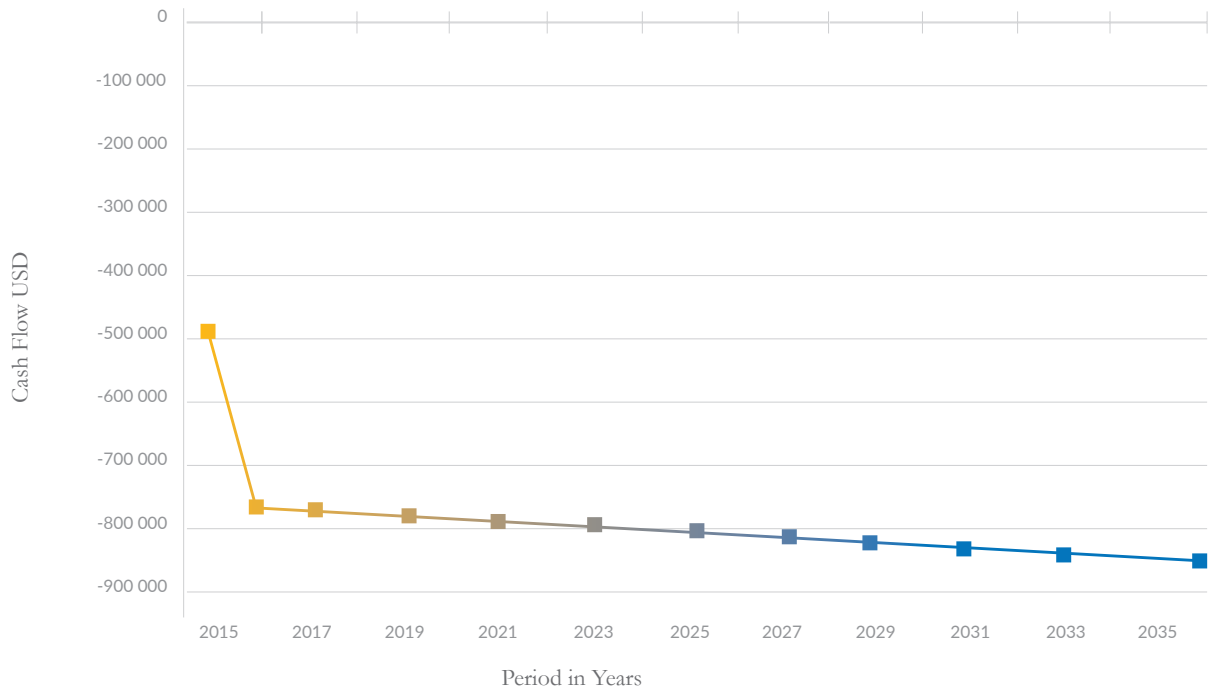
Summary

LOW PRIVATE
Financing Potential

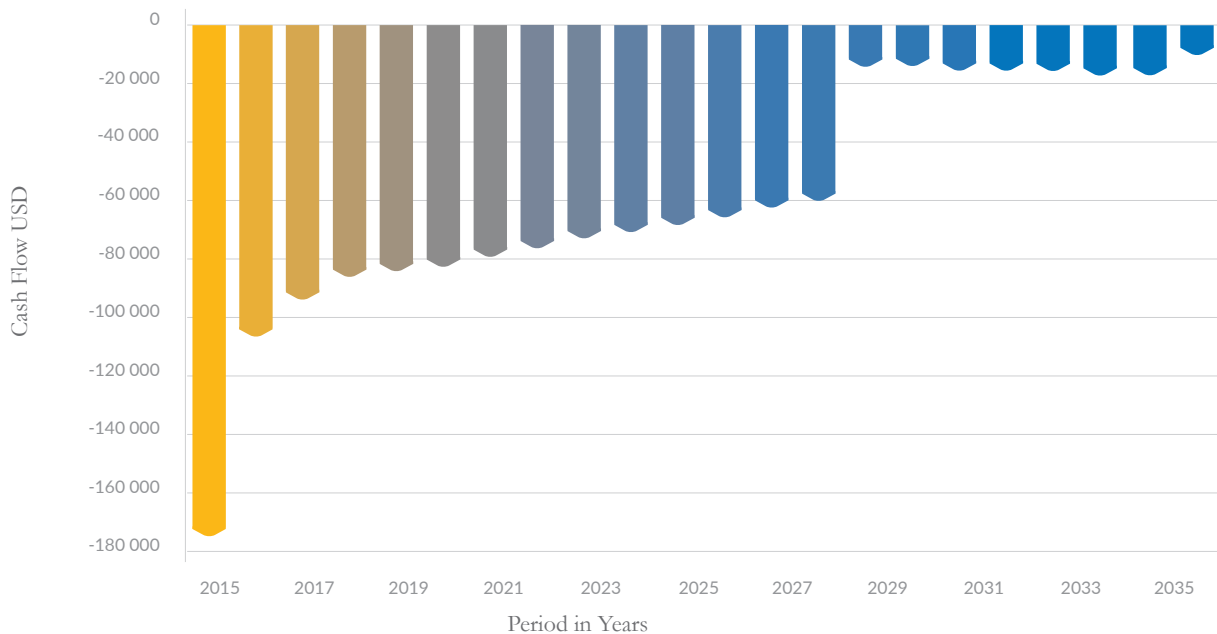
Nyacyonga

RoadSide Station

Financial Cash Flow | Value Creation



Equity Cash Flow



Sponsors Financial Return

Equity FIRR

--

Solvency/Bankability

DSCR 5/yr

-0.1

General Assumptions

WACC Rate

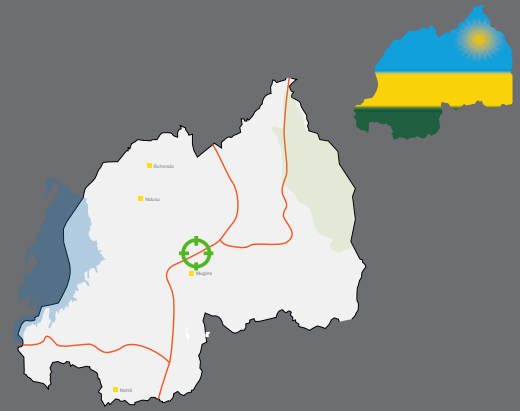
8.19%

Cost of capital (ke)

11.5%



Ruhango RoadSide Station



Proposed Amenities

1. Service station
2. Shops
3. Washrooms
4. Restaurant
5. Truck repair
6. Hotel
7. Bank
8. Truck parking
9. Minibuses parking
10. Pedestrian and green areas
11. Green areas

Proposed Design



Vehicle Statistics

Passenger Cars



733

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	2
Number of users per day	0
Average length of time parked (hours) per vehicle	0.5

Minibuses



257

Number of Vehicles Stopping Daily	64
Average Number of Passengers per Vehicle	10
Number of users per day	643
Average length of time parked (hours) per vehicle	1

Large Buses



17

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	30
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Trucks



354

Number of Vehicles Stopping Daily	89
Average Number of Passengers per Vehicle	2
Number of users per day	177
Average length of time parked (hours) per vehicle	1

Estimated Investment Cost

Investment Cost (US \$)

845,198

Maintenance and Operating Cost (US\$/Yr)

28,569

Global Financial Feasibility

FNPV

-0.79 Mill. US\$

FIRR

--%

Disc. P/B period

--

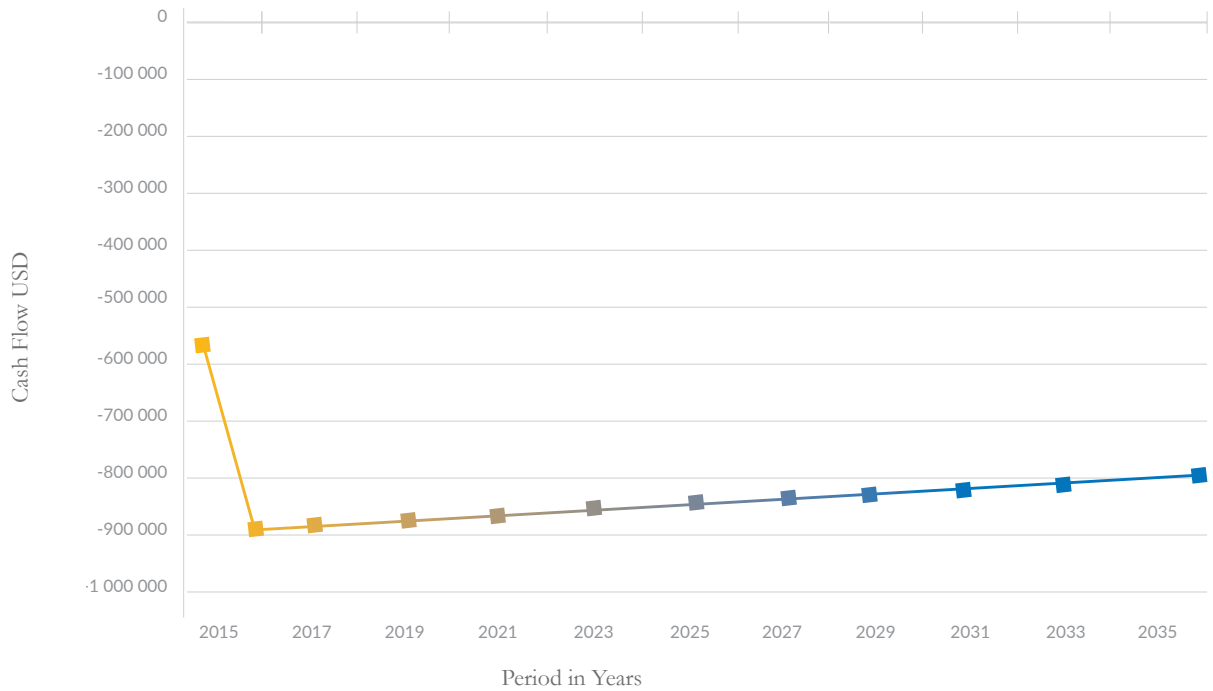
Summary

LOW PRIVATE
Financing Potential

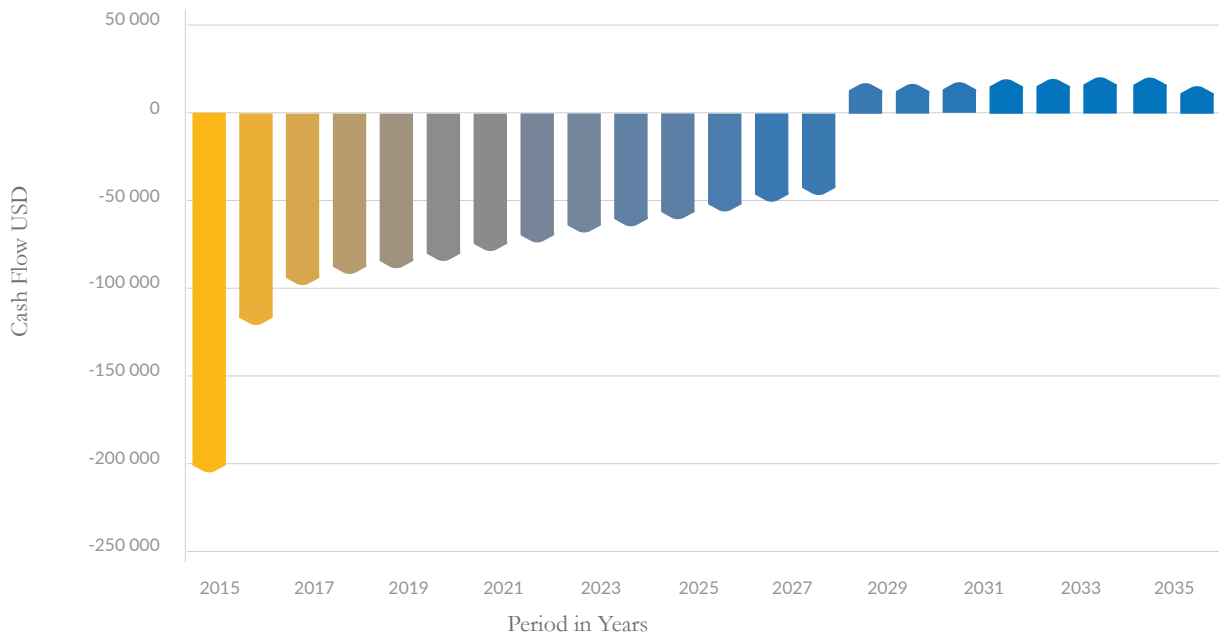
Ruhango

RoadSide Station

Financial Cash Flow | Value Creation



Equity Cash Flow



Sponsors Financial Return

Equity FIRR

--

Solvency/Bankability

DSCR 5/yr

-0.09

General Assumptions

WACC Rate

8.19%

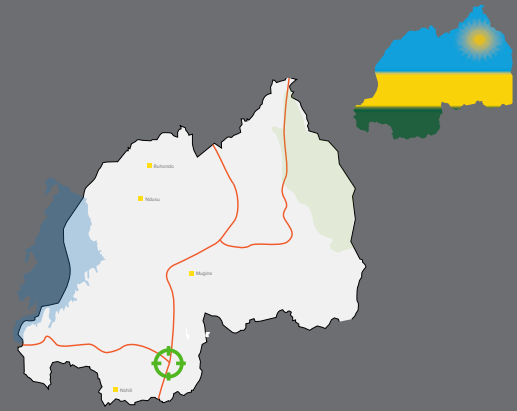
Cost of capital (ke)

11.5%



Huye

RoadSide Station



Proposed Amenities

- 1. Service station
- 2. Shops
- 3. Washrooms
- 4. Restaurant
- 5. Health clinic
- 6. Bureau office
- 7. Car workshop
- 8. Vehicle cleaning
- 9. Truck services
- 10. Hotel
- 11. Bank
- 12. Police checkpoint
- 13. Public information area/Administrative offices
- 14. Truck parking
- 15. Passenger parking
- 16. Minibuses parking
- 17. Pedestrian and green areas
- 18. Green areas

Proposed Design



Vehicle Statistics

Passenger Cars



617

Nombre de véhicules qui s'arrêtent par jour	123
Nombre moyen de passagers par jour	2
Nombre d'usagers par jour	247
Longueur moyen de temps de parking (heures) par véhicule	0.5

Minibuses



365

Nombre de véhicules qui s'arrêtent par jour	91
Nombre moyen de passagers par jour	10
Nombre d'usagers par jour	913
Longueur moyen de temps de parking (heures) par véhicule	1

Large Buses



17

Nombre de véhicules qui s'arrêtent par jour	0
Nombre moyen de passagers par jour	30
Nombre d'usagers par jour	0
Longueur moyen de temps de parking (heures) par véhicule	1

Trucks



257

Nombre de véhicules qui s'arrêtent par jour	64
Nombre moyen de passagers par jour	2
Nombre d'usagers par jour	129
Longueur moyen de temps de parking (heures) par véhicule	1

Estimated Investment Cost

Investment Cost (US \$)

1,039,951

Maintenance and Operating Cost (US\$/Yr)

35,577

Global Financial Feasibility

FNPV

-0.11 Mill. US\$

FIRR

6.84%

Disc. P/B period

--

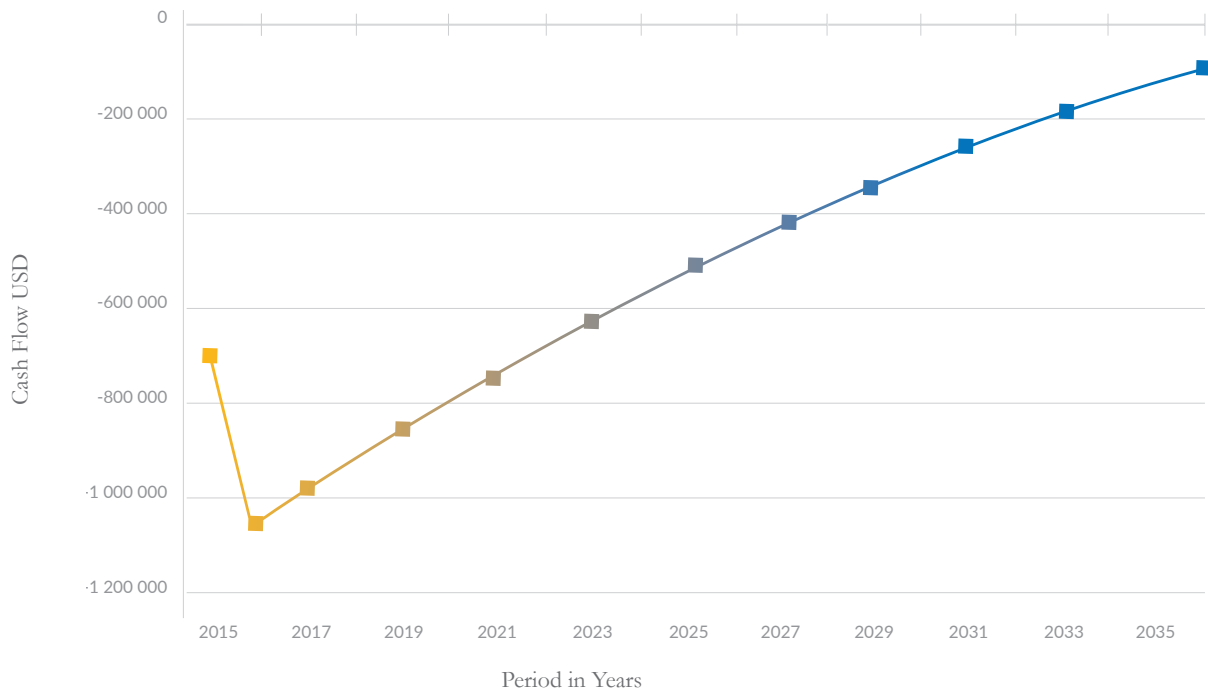
Summary

MEDIUM PRIVATE
Financing Potential

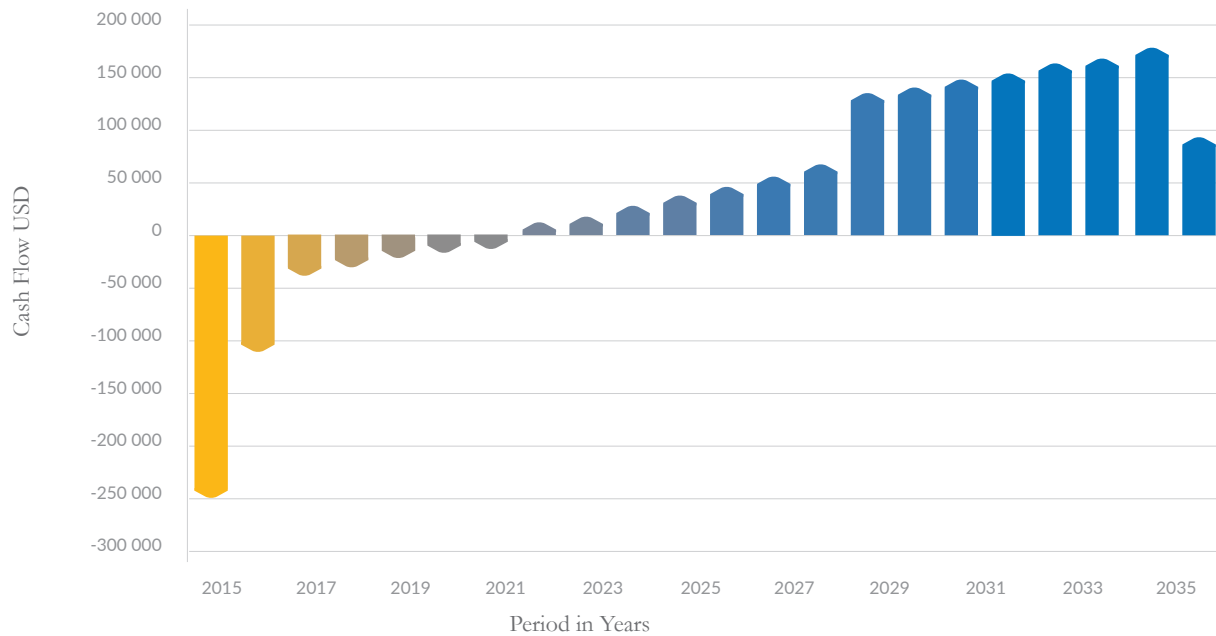
Huye

RoadSide Station

Financial Cash Flow | Value Creation



Equity Cash Flow



Sponsors Financial Return

Equity FIRR
6.86%

Solvency/Bankability

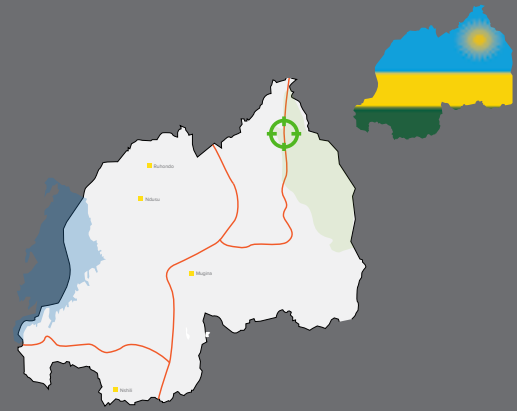
DSCR 5/yr
0.79

General Assumptions

WACC Rate
8.19%
Cost of capital (ke)
11.5%



Ryabega RoadSide Station



Proposed Amenities

1. Service station
2. Shops
3. Washrooms
4. Restaurant
5. Truck repair
6. Hotel
7. Bank
8. Truck parking
9. Minibuses parking
10. Pedestrian and green areas
11. Green areas

Proposed Design



Vehicle Statistics

Passenger Cars



1,508

Number of Vehicles Stopping Daily	123
Average Number of Passengers per Vehicle	2
Number of users per day	0
Average length of time parked (hours) per vehicle	0.5

Minibuses



126

Number of Vehicles Stopping Daily	91
Average Number of Passengers per Vehicle	10
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Large Buses



45

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	30
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Trucks



322

Number of Vehicles Stopping Daily	80
Average Number of Passengers per Vehicle	2
Number of users per day	161
Average length of time parked (hours) per vehicle	1

Estimated Investment Cost

Investment Cost (US \$)

722,533

Maintenance and Operating Cost (US\$/Yr)

26,774

Global Financial Feasibility

FNPV

-0.85 Mill. US\$

FIRR

--%

Disc. P/B period

--

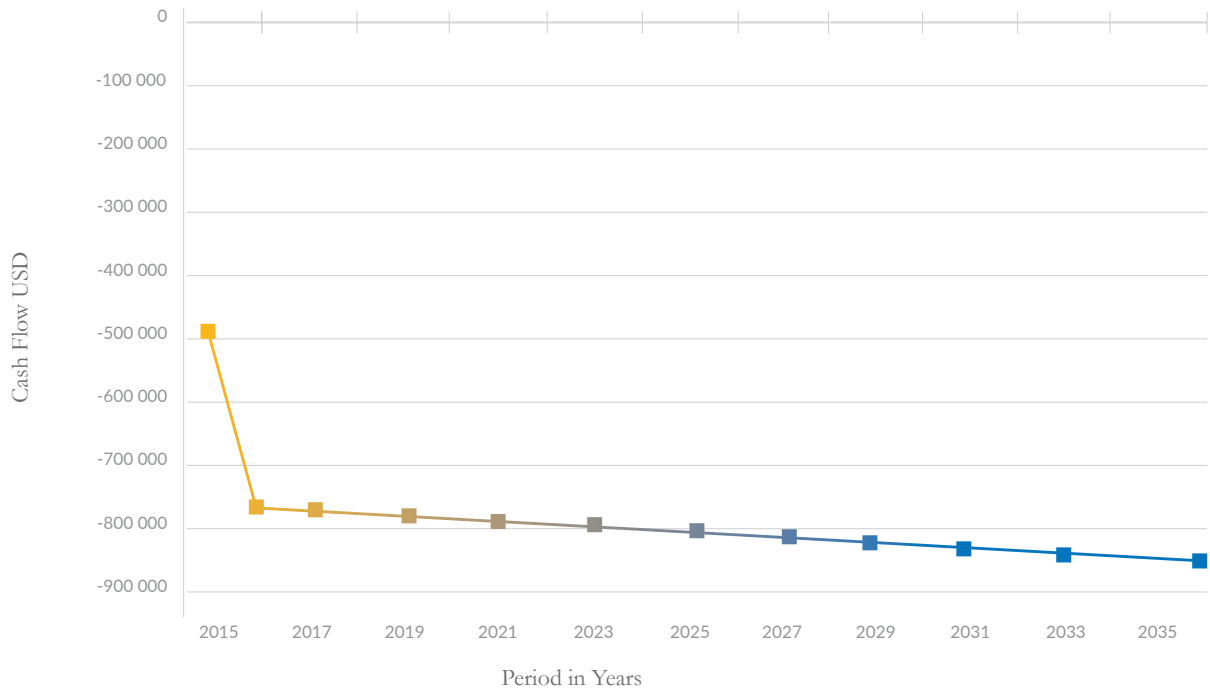
Summary

LOW PRIVATE
Financing Potential

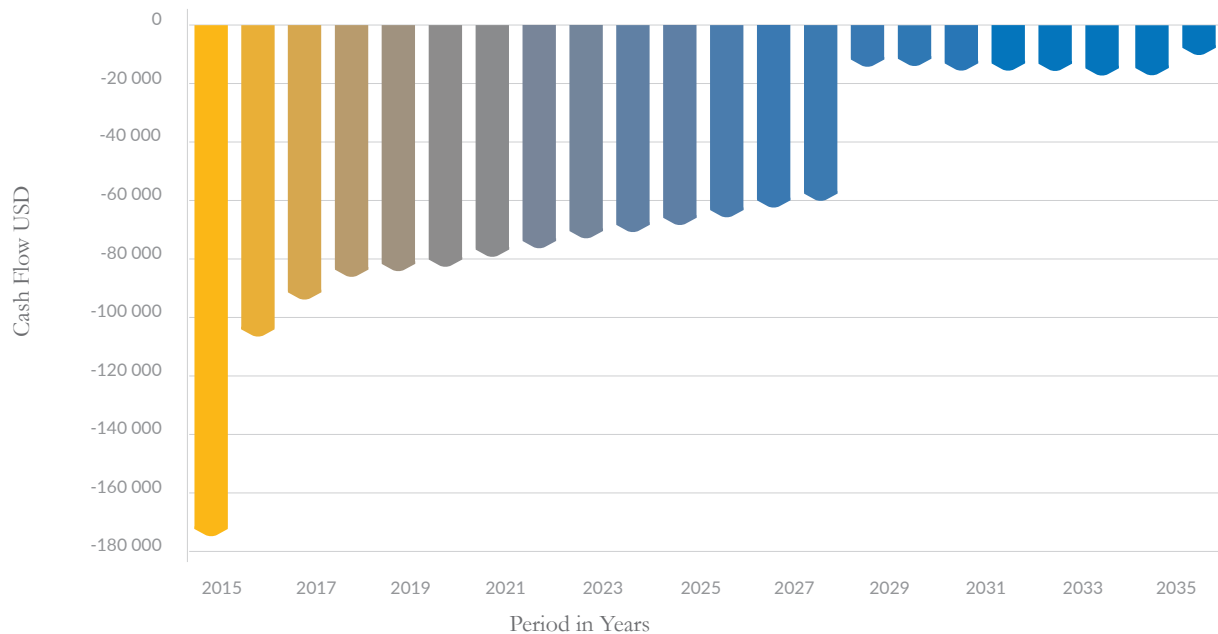
Ryabega

RoadSide Station

Financial Cash Flow | Value Creation



Equity Cash Flow



Sponsors Financial Return

Equity FIRR

--

Solvency/Bankability

DSCR 5/yr

-0.1

General Assumptions

WACC Rate

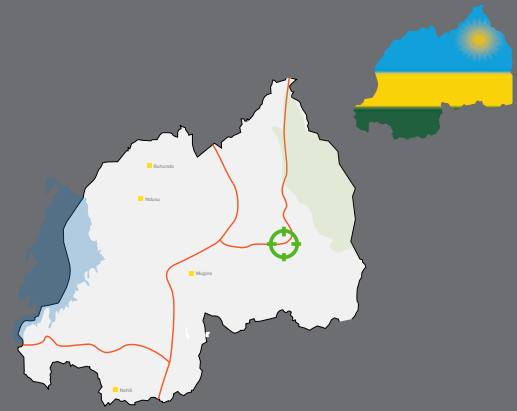
8.19%

Cost of capital (ke)

11.5%



Rugende RoadSide Station



Proposed Amenities

1. Service station
2. Shops
3. Washrooms
4. Restaurant
5. Bureau station
6. Truck repair
7. Vehicle cleaning
8. Police check point
9. Security services
10. Hotel
11. Truck parking
12. Pedestrian and green areas
13. Green areas

Proposed Design



Vehicle Statistics

Passenger Cars



754

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	2
Number of users per day	0
Average length of time parked (hours) per vehicle	0.5

Minibuses



63

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	10
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Large Buses



23

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	30
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Trucks



161

Number of Vehicles Stopping Daily	40
Average Number of Passengers per Vehicle	2
Number of users per day	80
Average length of time parked (hours) per vehicle	1

Estimated Investment Cost

Investment Cost (US \$)

850,204

Maintenance and Operating Cost (US\$/Yr)

30,327

Global Financial Feasibility

FNPV

-1.06 Mill. US\$

FIRR

--%

Disc. P/B period

--

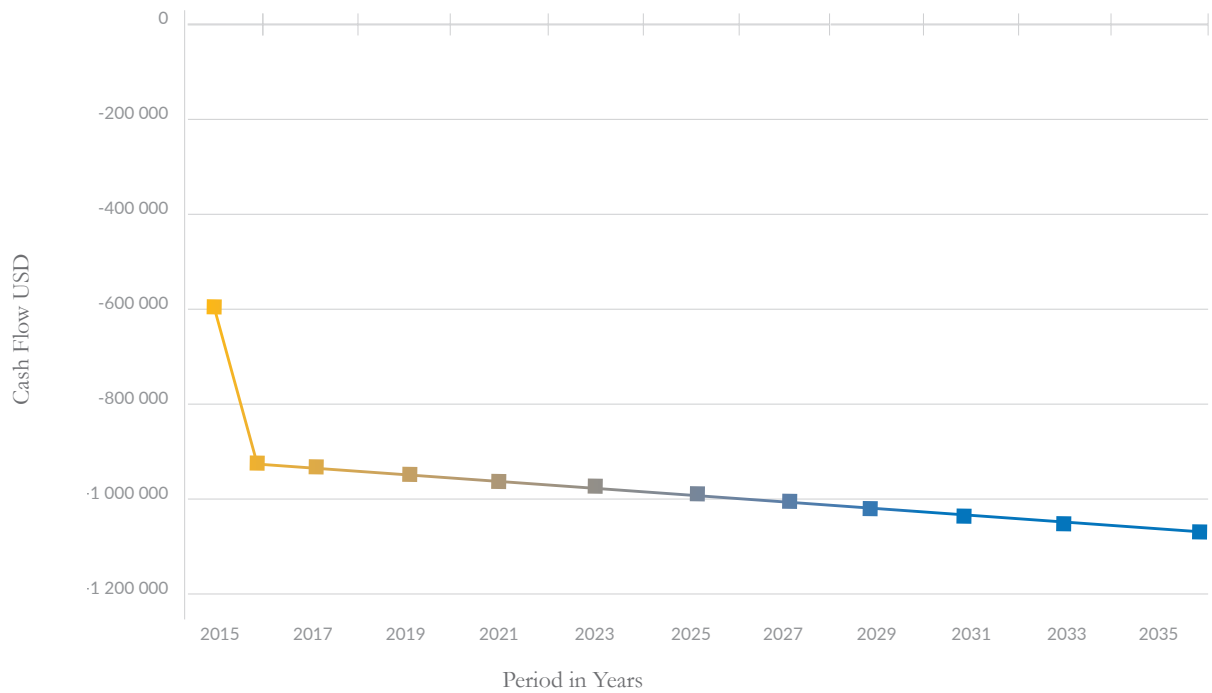
Summary

LOW PRIVATE
Financing Potential

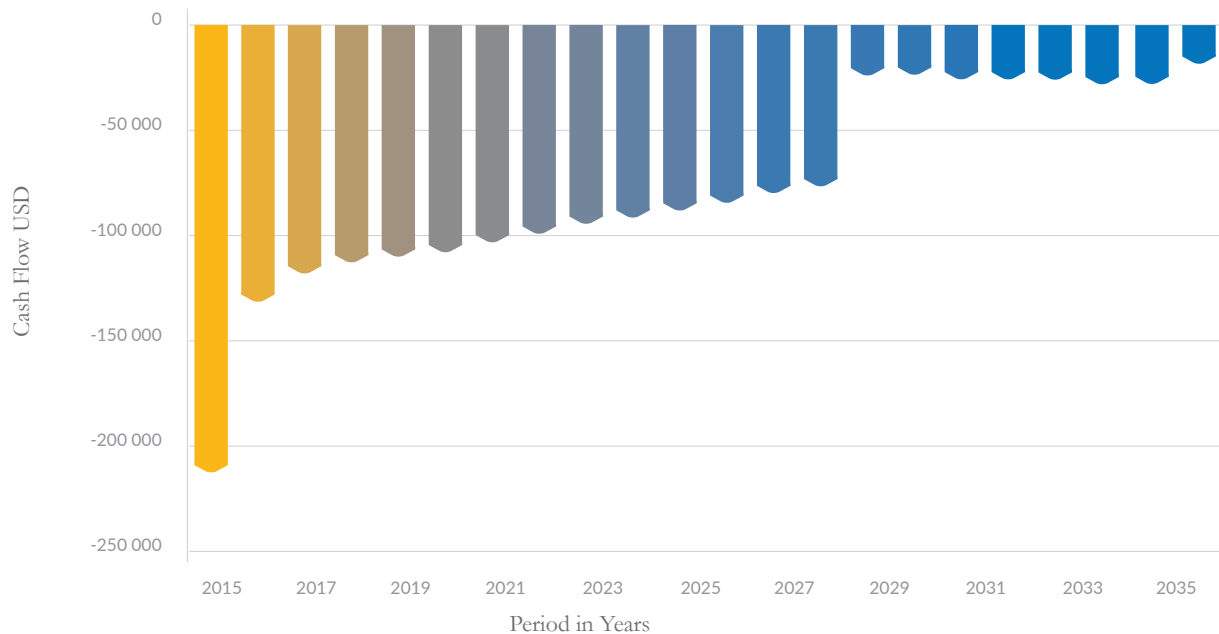
Rugende

RoadSide Station

Financial Cash Flow | Value Creation



Equity Cash Flow



Sponsors Financial Return

Equity FIRR

--

Solvency/Bankability

DSCR 5/yr

-0.13

General Assumptions

WACC Rate

8.19%

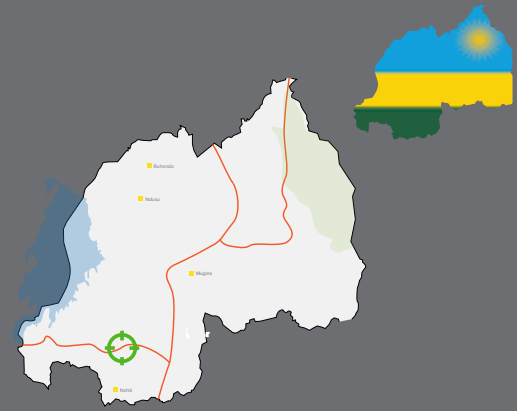
Cost of capital (ke)

11.5%



Kitabi

RoadSide Station



Proposed Amenities

1. Service station
2. Shops
3. Washrooms
4. Restaurant
5. Truck repair
6. Hotel
7. Bank
8. Truck parking
9. Minibuses parking
10. Pedestrian and green areas
11. Green areas

Proposed Design



Vehicle Statistics

Passenger Cars



411

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	2
Number of users per day	0
Average length of time parked (hours) per vehicle	0.5

Minibuses



243

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	10
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Large Buses



11

Number of Vehicles Stopping Daily	0
Average Number of Passengers per Vehicle	30
Number of users per day	0
Average length of time parked (hours) per vehicle	1

Trucks



172

Number of Vehicles Stopping Daily	43
Average Number of Passengers per Vehicle	2
Number of users per day	86
Average length of time parked (hours) per vehicle	1

Estimated Investment Cost

Investment Cost (US \$)

722,533

Maintenance and Operating Cost (US\$/Yr)

26,774

Global Financial Feasibility

FNPV

-0.85 Mill. US\$

FIRR

--%

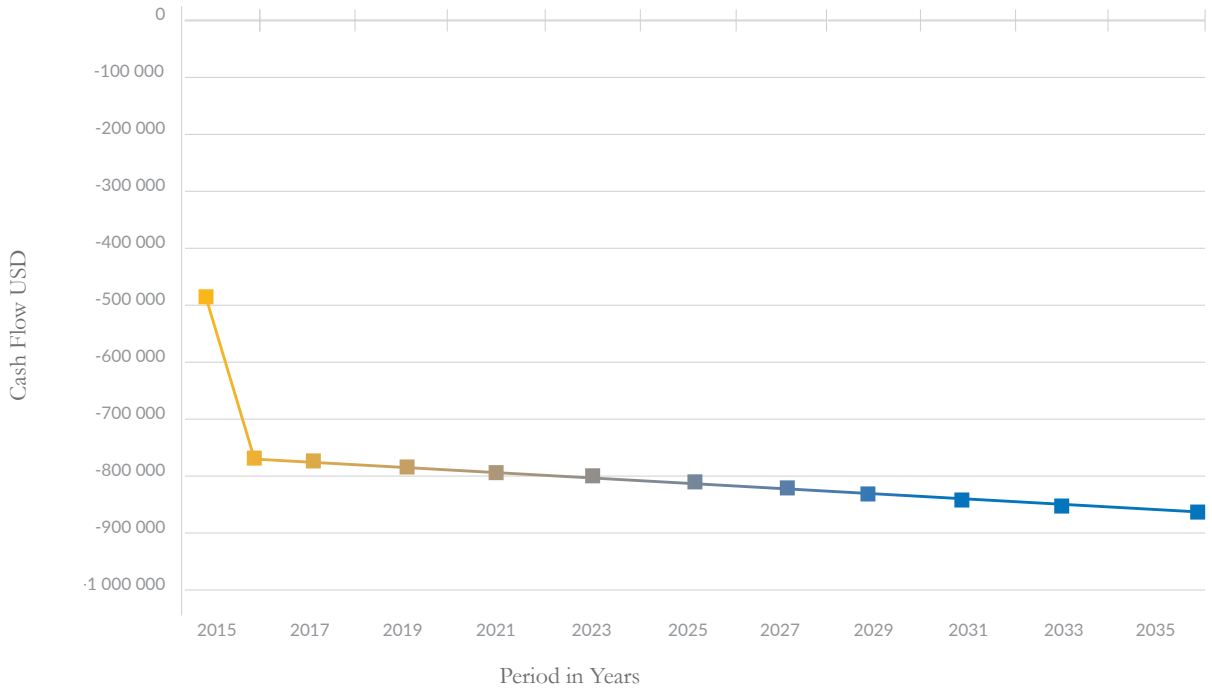
Disc. P/B period

--

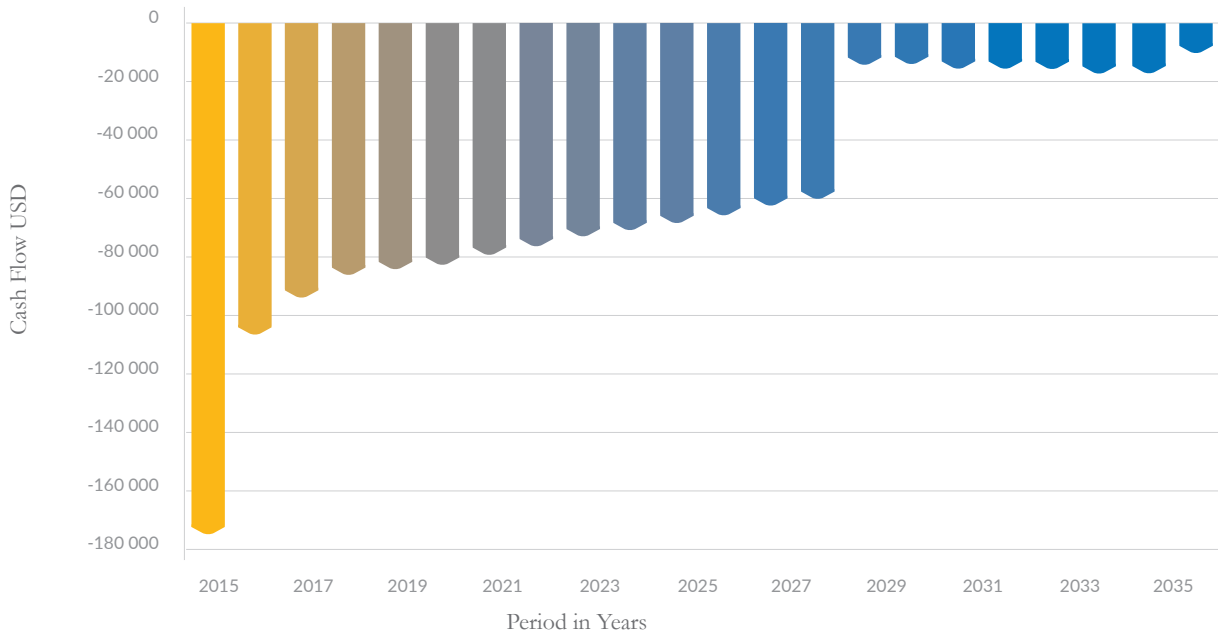
Summary

LOW PRIVATE
Financing Potential

Financial Cash Flow | Value Creation



Equity Cash Flow



Sponsors Financial Return

Equity FIRR

--

Solvency/Bankability

DSCR 5/yr

-0.12

General Assumptions

WACC Rate

8.19%

Cost of capital (ke)

11.5%

For Technical Information, Facilitation and Coordination Contact:



Northern Corridor Transit and Transport Coordination Authority
House 1196, Links Road, Nyali.



P. O. Box 34068 - 80118
Mombasa, Kenya



Email:
tca@ttcanc.org



Telefax:
+254 41 4470735



Phone:
+254 41 4470734
+254 20 2000881



Web
www.ttcanc.org

**For Investment Opportunities Contact
the respective Northern Corridor Member States**

(Kenya, Uganda, Rwanda, Burundi, South Sudan, DR Congo)
