Corridor Transport Observatories

- CTO are a toolbox of instruments measuring the multiple dimensions of corridor performance tapping into multiple data sources:
  - Port authorities
  - Customs
  - Terminals and ICDs
  - Weighbridge operations
  - Railways
  - Logistics industry associations

- Truck monitoring through GPS fills a critical information gap in that toolbox in describing route trip patterns and crossing times at choke points
Proof of concept for truck monitoring by GPS in E&S Africa

- Almost all trucking companies in E&S Africa have vehicle fleet management systems using GPS
- Entry point is the GPS service provider, not individual truck fleets:
  - On the plus side: one interface / data collection point for large truck fleet
  - On the negative side: less information on the characteristics of the truck fleet and the companies
- That enables collecting and processing large amount of tracking data throughout the region

- Close to 100,000 trucks
- Over 2 billions records per month
- 50,000 monthly crossings over 42 borders
- 25,000 monthly trips over 50 routes
The complex realities of border crossing and driving patterns

Frequency distribution for border crossing

Routes Durban - Lubumbashi

Route Dar - Lubumbashi
But data connects to the wider corridor and logistics agenda

- Opening borders 24/7?

- Two drivers per truck to maximize driving time?

- Impact of border procedures changes?

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**Graphs:**

- **Percentage of time the truck is idle:**
  - South Africa to Zimbabwe
  - Zimbabwe to South Africa
  - Kenya to Uganda
  - Uganda to Kenya

- **Median travel time in days:**
  - Busia (Kenya to Uganda)
  - Busia (Uganda to Kenya)
  - Gatuna (Rwanda to Uganda)
  - Gatuna (Uganda to Rwanda)
  - Malaba (Kenya to Uganda)
  - Malaba (Uganda to Kenya)

- **Median time to cross (hours):**
  - Feb-17
  - Apr-17
  - Jun-17
  - Aug-17
  - Oct-17
  - Dec-17
  - Feb-18
  - Apr-18

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**Data points:**

- Median travel time in days:
  - Feb-17: 11.4
  - Apr-17: 5.3
  - Jun-17: 2.7

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**Legend:**

- Orange line: South Africa to Zimbabwe
- Red line: Zimbabwe to South Africa
- Green line: Kenya to Uganda
- Blue line: Uganda to Kenya

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Data is good, but it needs to be interpreted to support advocacy

- Several regional institutions have the knowledge to add value to the data:
  - The trucking industry, through their regional industry federation FESARTA
  - The Tripartite RECs
  - The Corridors, through their African federation ACMA
  - Universities
  - ...

- The SSATP supported the development of the TMS until March 2018, and since, USAID Southern Africa has taken over the funding of the system
- A more sustainable solution needs to be defined jointly
Lessons and challenges

- The proof of concept works, but under a specific set of conditions:
  - Access to data (go / no go criteria)
  - Technical capability to process the data (requires a specific skillset but manageable)
  - Funding cannot be on a commercial basis, so requires public funding (donors for the moment)
- The route chosen by SSATP was to partner with a technical provider for both access to data and its processing - Crickmay

- Discussions are still ongoing for the sustainability of the system
  - SSATP funding Nov 2016 to March 2018
  - USAID funding April 2018 to March 2019
- Discussions on possible funding from TTTFP stalled
- NEPAD intends to fund the system under its 2020 budget
- Once funding becomes stable, upgrades of the system that were put on hold will resume
Thank you
Merci

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