



*The Leading Global Provider of
Integrated Infrastructure Asset Management
Software Solutions*



DIREKTORAT JENDERAL
BINA MARGA
KEMENTERIAN PEKERJAAN UMUM DAN
PERUMAHAN RAKYAT

Integrated Strategic Planning in Indonesia

James Robertson

Business Development Director - EMEA

Who is AgileAssets?



- Core Focus
- Engineers
- Developers
- Academic
- Community
- User Driven Roadmap

AgileAssets Today



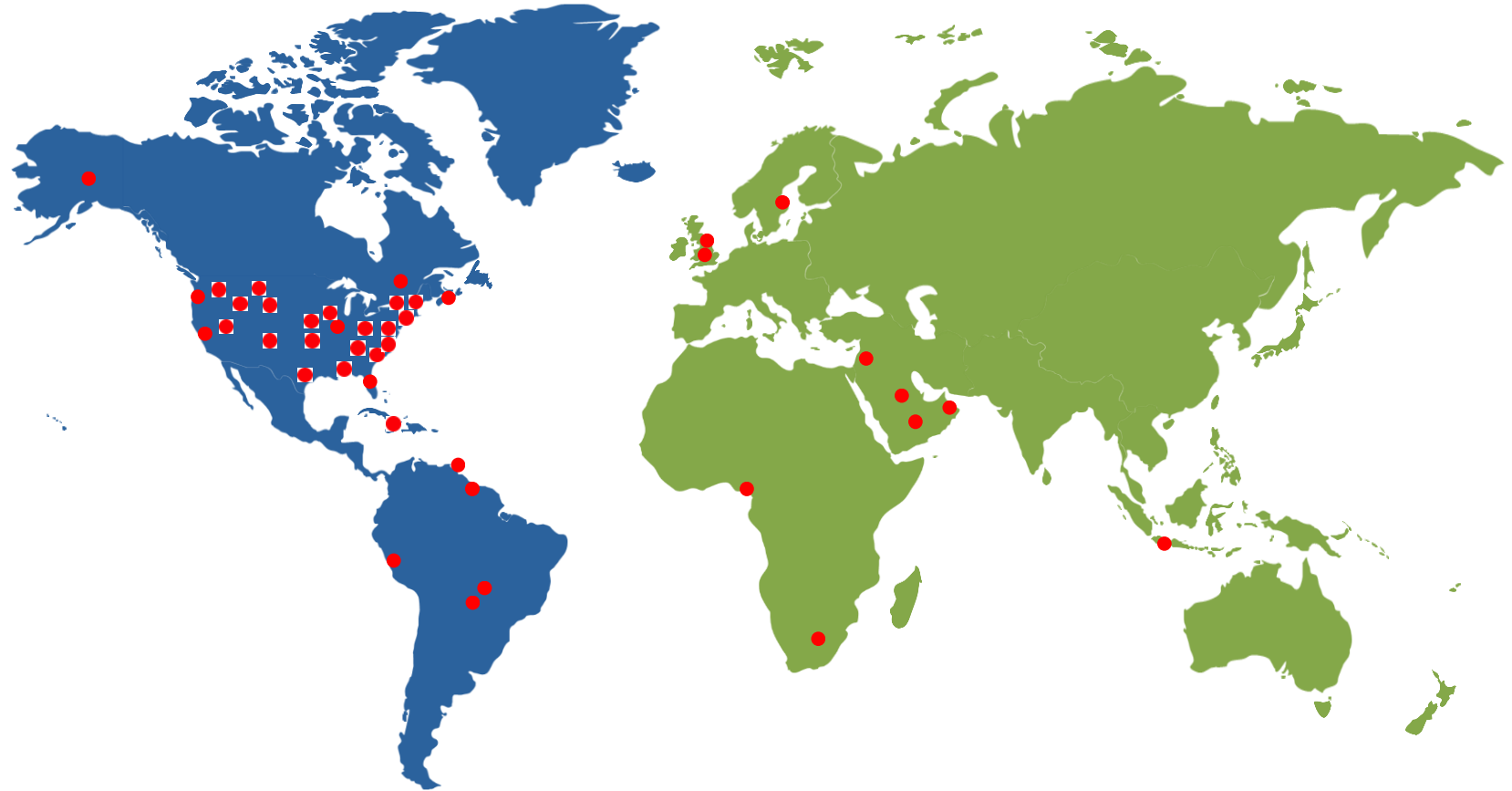
Projects and Clients

26

20

15

Partner
Network





Indonesia

Indonesia - Quick Facts

- 14th Largest country (area) in the world (1,910,931 sq. km)
- 4th Largest Country (population): 261 million
- 17,508 Islands
- Second longest coast line in the world (over 54,000 km)
- 15th Largest Road Network – 517,663 km



Indonesia Bina Marga – Public Works

- 47,017 km (centerline) – National Roads
 - Paved: 45,071 km
 - Unpaved: 1,946 km
- Number of Roads:
 - 3,194
- Bridges
 - 27,328



Indonesia Bina Marga – IRMS Project Timeline



BINA MARGA

KEMENTERIAN PEKERJAAN UMUM DAN
PERUMAHAN RAKYAT

Market
Research



May

Tender



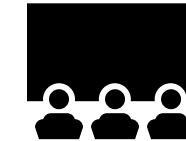
November

Implementation



December

Final Training



September

2017

2018

October



Requirements

December



Project Award

September



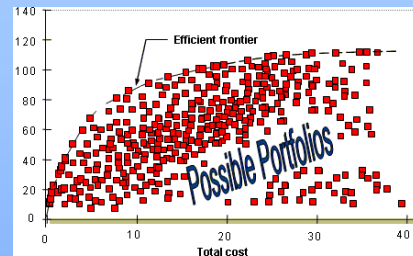
Go-Live



AgileAssets Integrated Asset Management System



Portfolio



Pavement Management System



Bridge Management System



Safety Management System

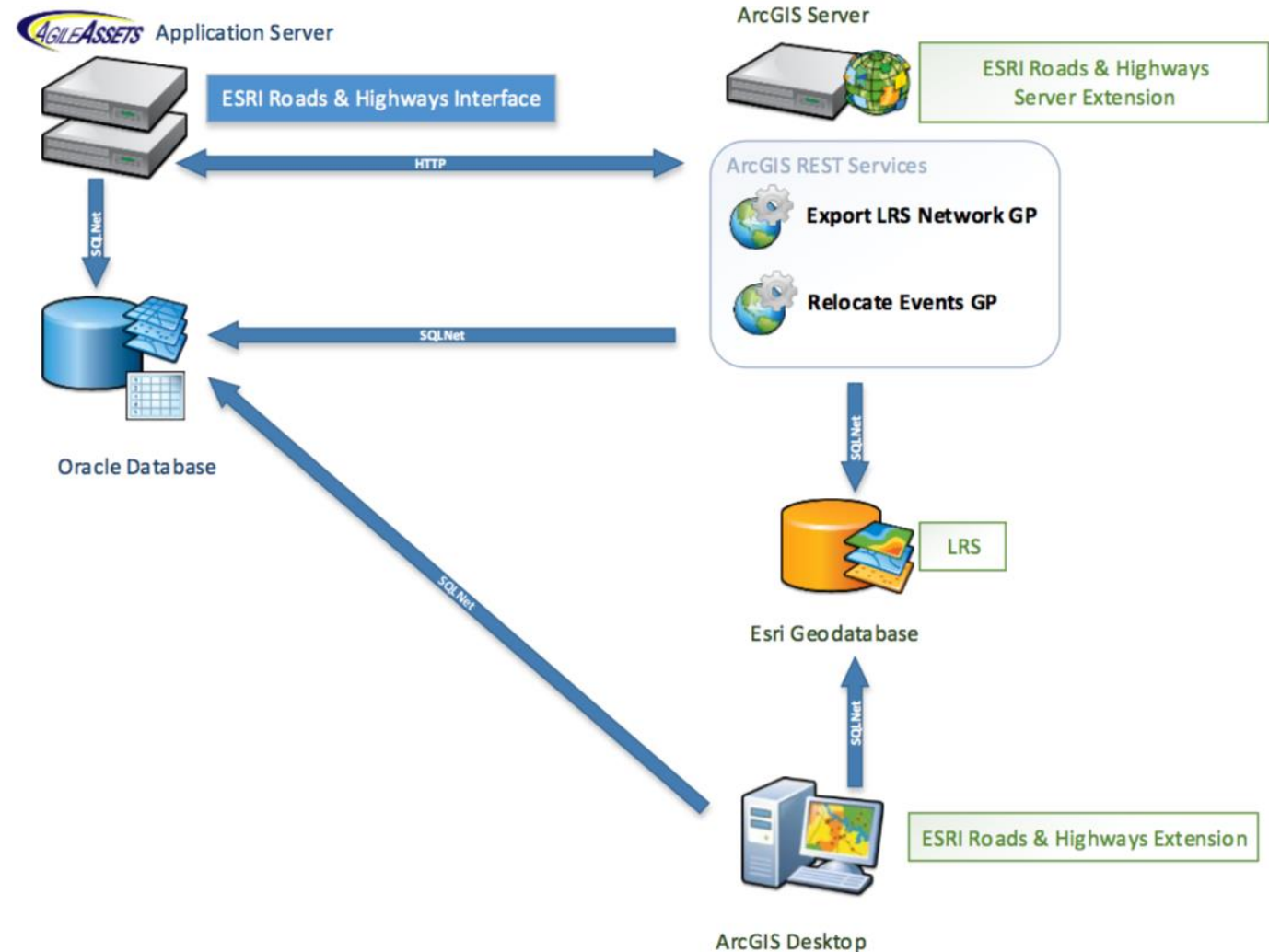


ArcGIS

Integration Between AgileAssets & ESRI - LRS

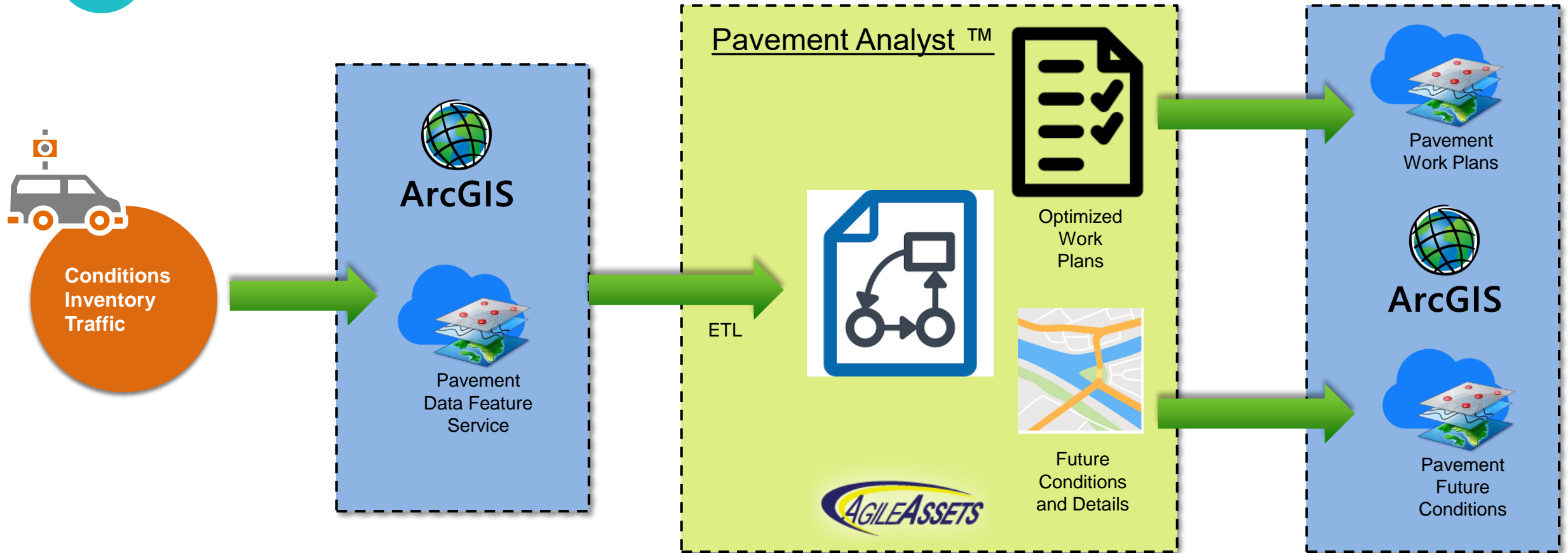
1

Linear Referencing System



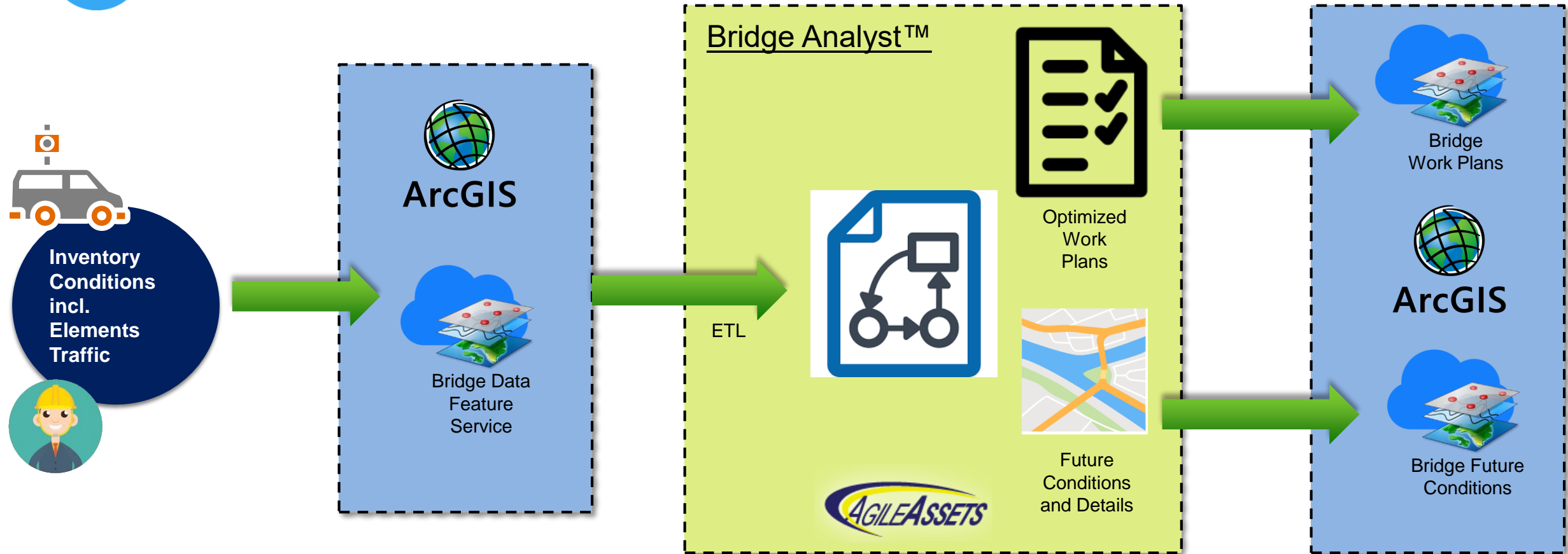
Integration Between AgileAssets & ESRI - Pavements

2 Pavement Data



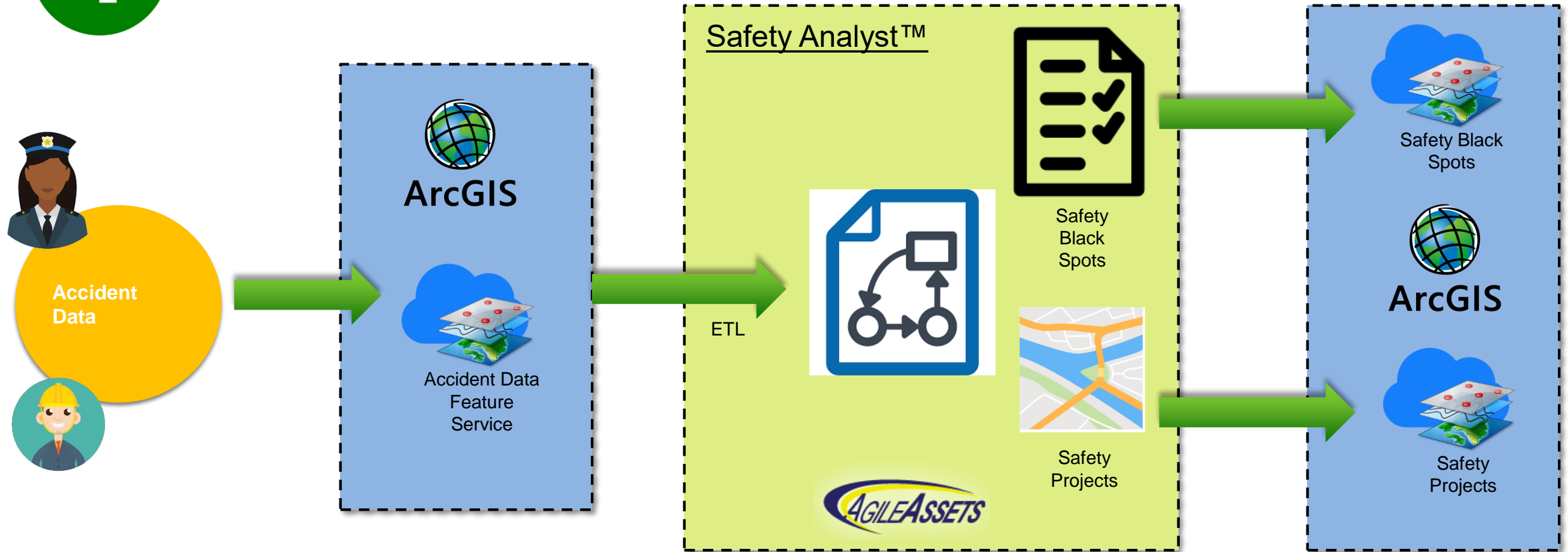
Integration Between AgileAssets & ESRI - Bridges

3 Bridge Data



Integration Between AgileAssets & ESRI - Safety

4 Safety Data



Benefits to the Organization

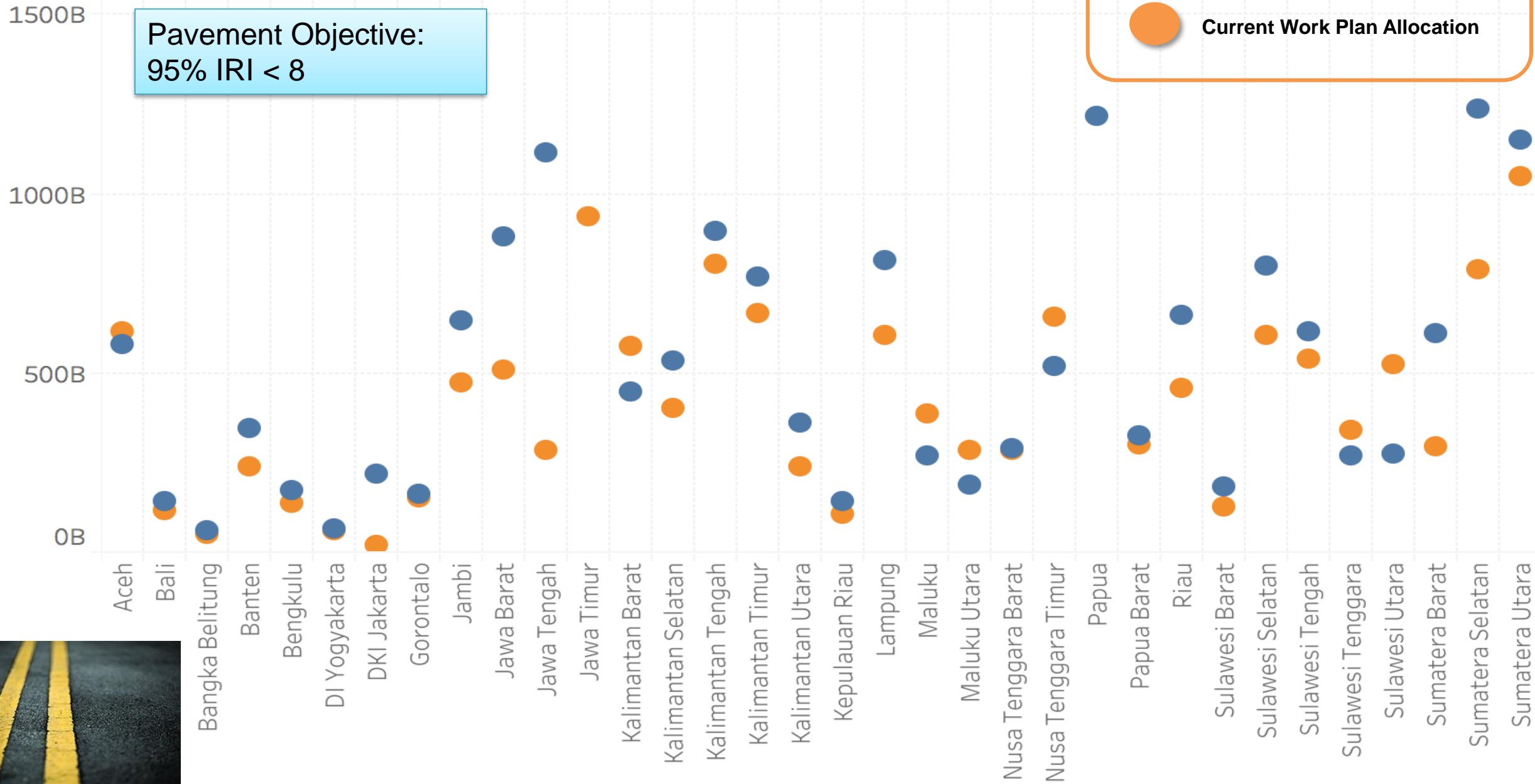
- Data Centric Approach – comparison of Current Work Plans versus Optimized Work Plan

Kebutuhan Anggaran Preservasi (Pavement) 2019 ➤

Pavement Objective:
95% IRI < 8

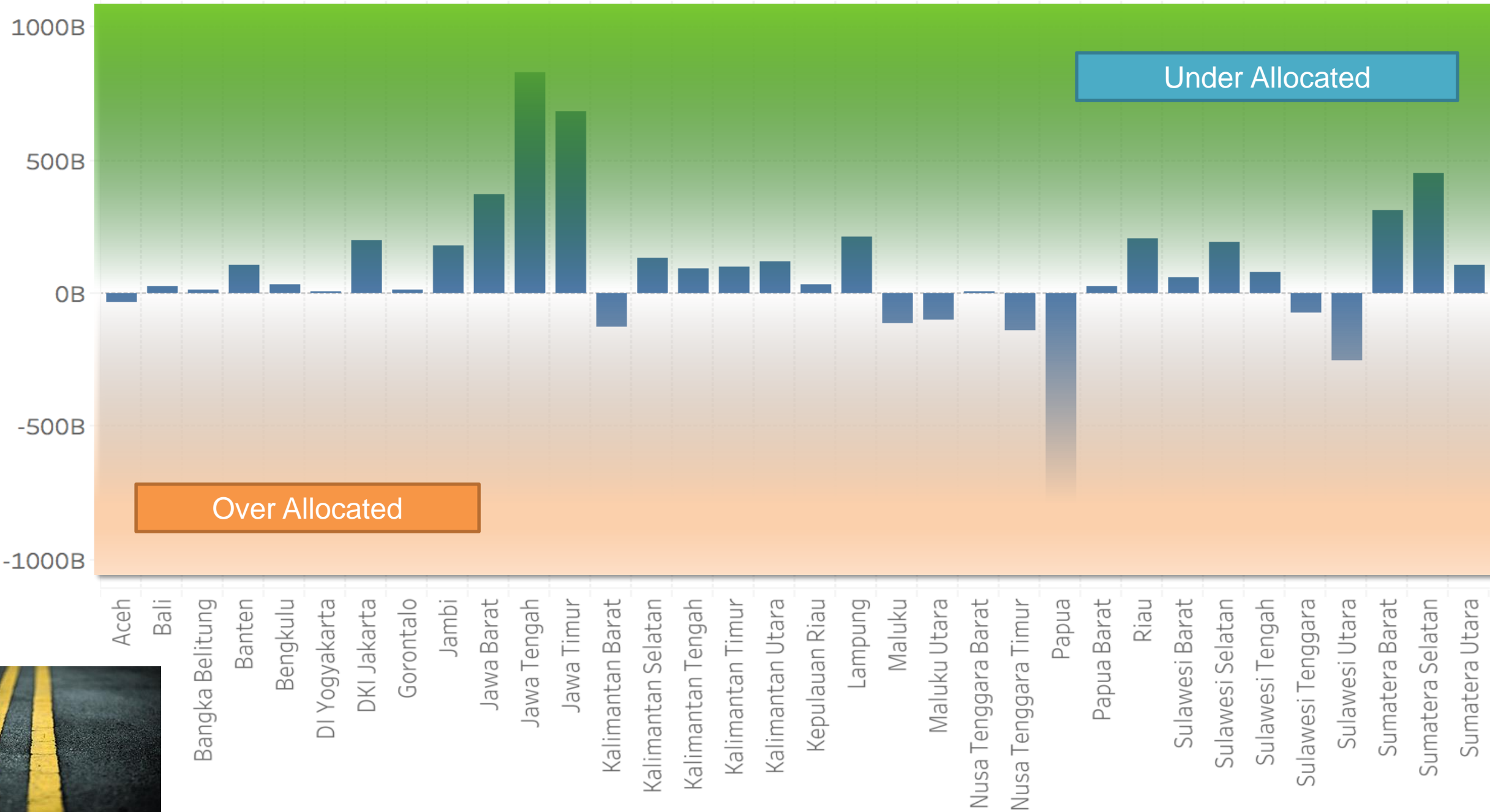
Provinsi

- Optimized Work Plan Allocation
- Current Work Plan Allocation



Provinsi

Perbedaan PAGU & SKENARIO ★



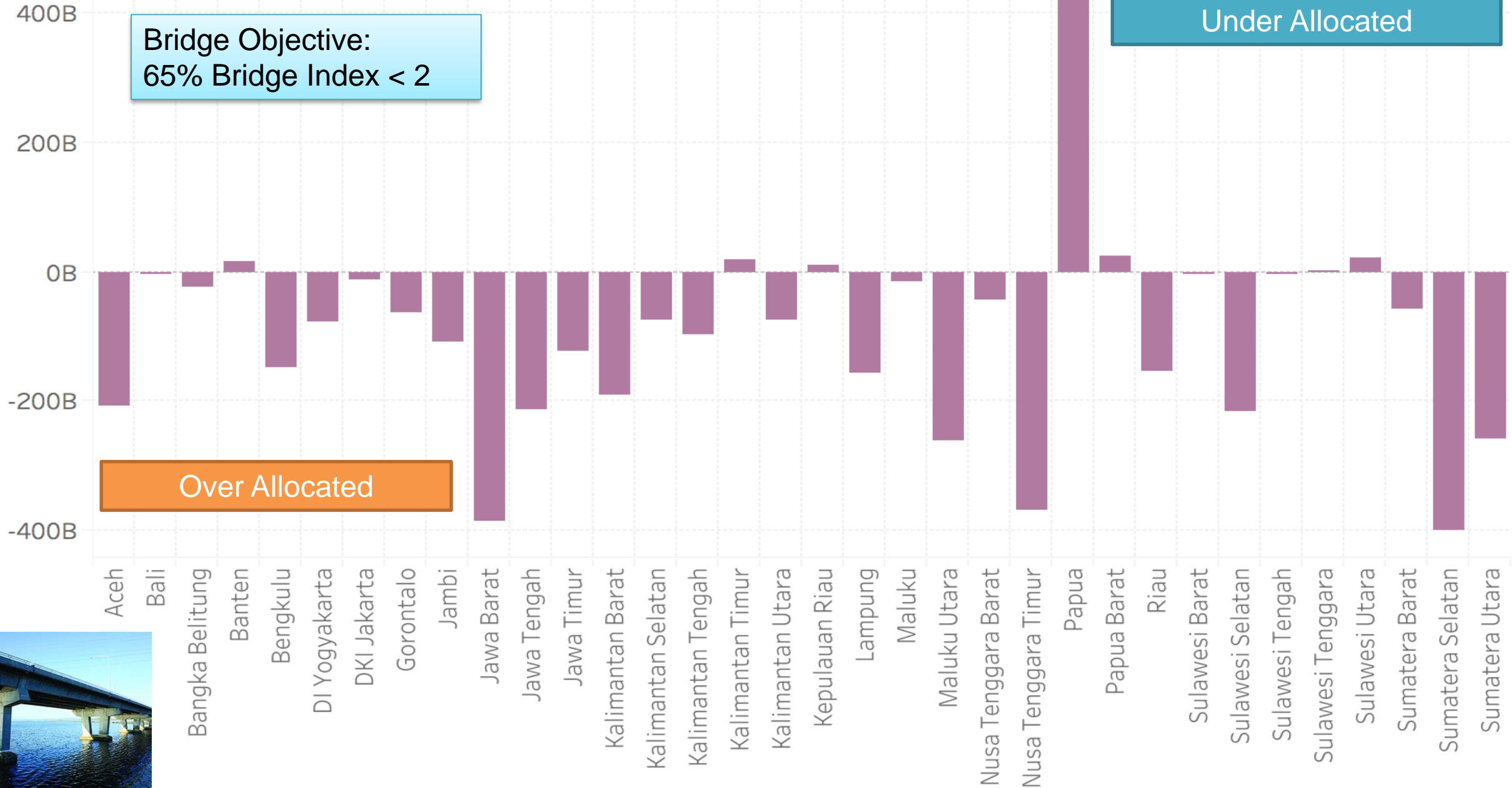
Provinsi

Perbedaan PAGU & SKENARIO

Bridge Objective:
65% Bridge Index < 2

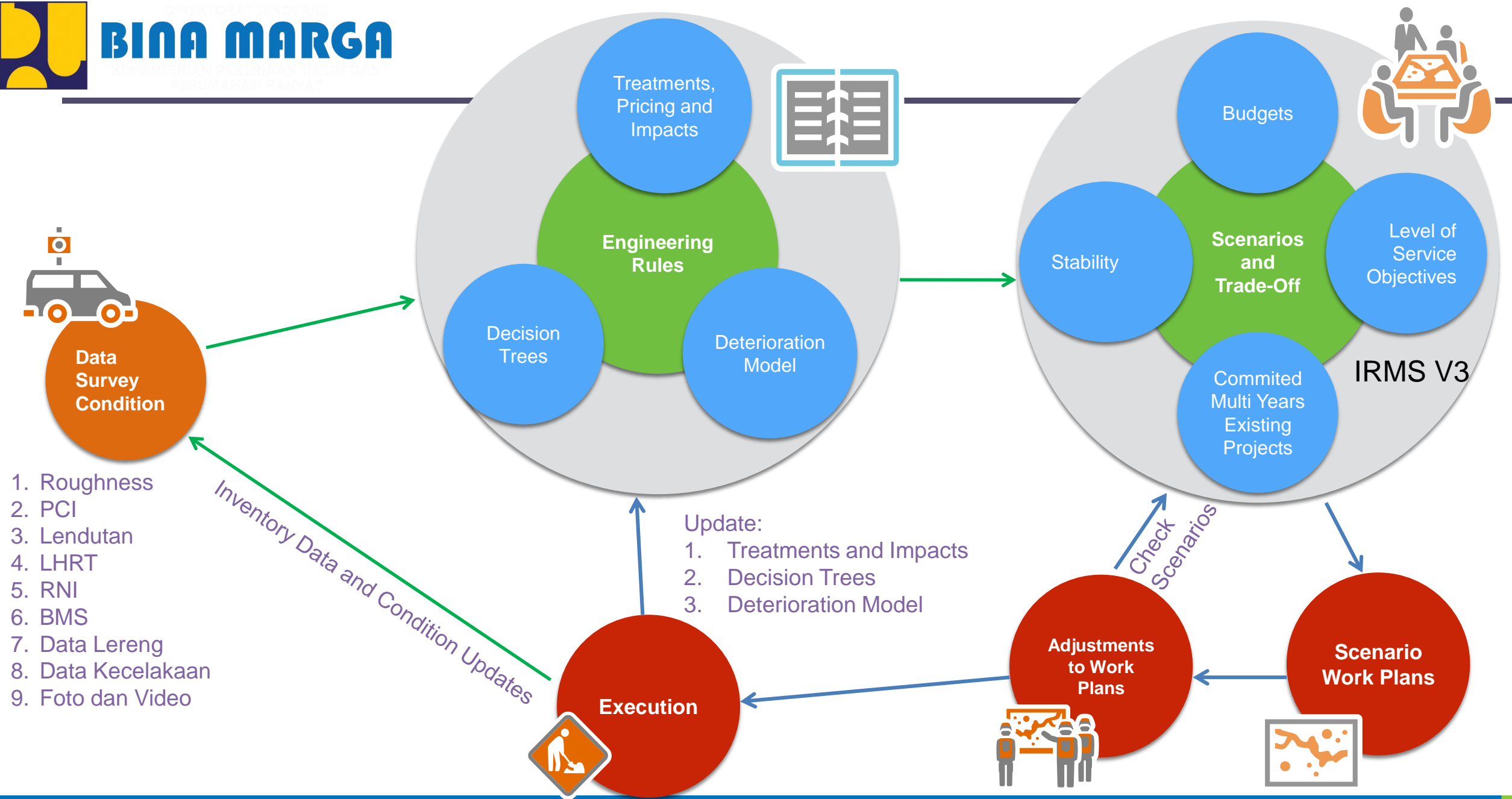
Under Allocated

Over Allocated



Benefits to the Organization

- Data Centric Approach – comparison of Current Work Plans versus Optimized Work Plan
- Systematic Approach – Established Processes and Engineering Rules with Feedback Loops



- 1. Roughness
- 2. PCI
- 3. Lendutan
- 4. LHRT
- 5. RNI
- 6. BMS
- 7. Data Lereng
- 8. Data Kecelakaan
- 9. Foto dan Video

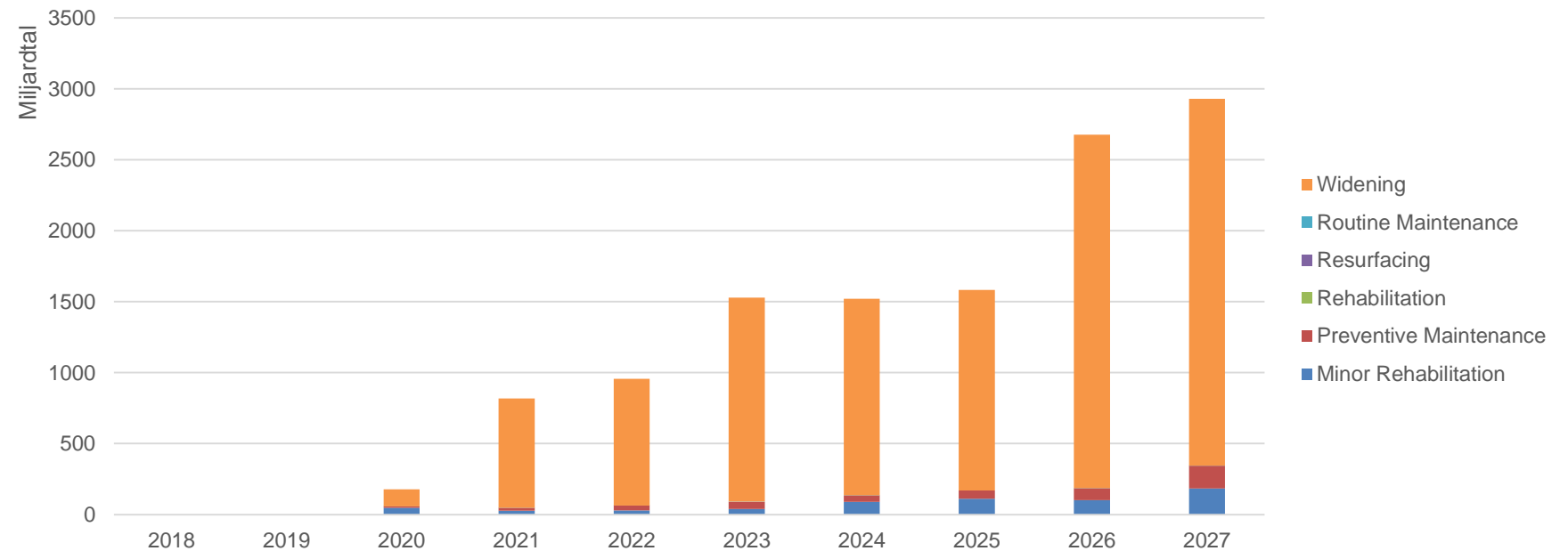
Benefits to the Organization

- Data Centric Approach – comparison of Current Work Plans versus Optimized Work Plan
- Systematic Approach – Established Process and Engineering Rules
- Better Decisions through Better Analytics

- Ability to run Level of Service optimization:
 - Minimum Budget (and work plan) to maintain 90% of Network IRI below 8 for 10 years



Worst First
Impossible



Multi-Constraint
Optimization

Questions

