



Leveraging Advanced Technologies for Fighting Corruption in Infrastructure Project Delivery

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INTRODUCTION

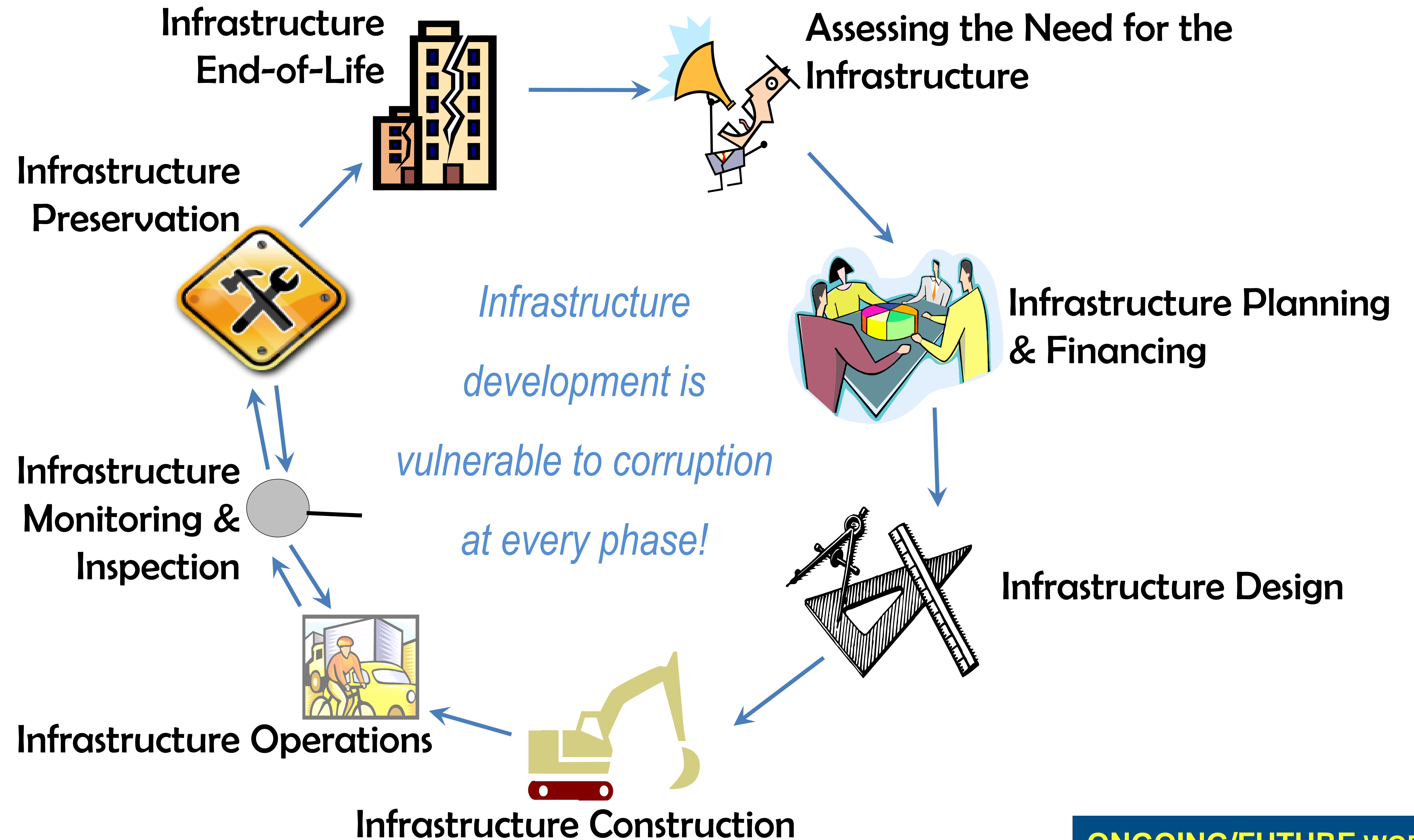
- ❑ \$2.6 trillion (over 5% of global GDP) lost annually due to collusion, corruption, and fraud
- ❑ Impacts: reduced funds for development; lower quality of life; increased poverty; erosion of trust social contract between societies and governments.
- ❑ The World Bank considers corruption as a main challenge to its institutional goals of ending extreme poverty by 2030
- ❑ Corruption reduction is aligned with the UN's Sustainable Development Goals (SDGs) and Financing for Development vision

OBJECTIVES

- ❑ Develop multi-dimensional framework to identify/measure corruption at any phase of infrastructure development
- ❑ Will include deployment of technology for enhanced real-time monitoring of physical and institutional processes

MONITORING

- ❑ Data analytics (quadrant analysis, efficiency frontier analysis, data envelopment analysis, etc.)
- ❑ Remote sensing
- ❑ Image capture/processing to verify contract work accomplished; real time
- ❑ GIS/GPS
- ❑ Smart sensors and other autonomous equipment
- ❑ Electronic government



OUTCOMES

- ❑ Comparison of the project with similar projects in similar environments, of
 - work output
 - delivery costs
- ❑ Real-time comparison of accomplished work with established standards and specifications

ONGOING/FUTURE WORK

- ❑ Refining data needs
- ❑ Developing online data capturing system
- ❑ Improving accuracy of image processing
- ❑ Case study applications