



# MONITORING NATIONAL PLANS USING GIS: SOLUTION FOR KAZAKHSTAN

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Problem!



2020 NATIONAL  
DEVELOPMENT PLAN

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Imagery Dates: Jun 4, 2005 - Jun 1, 2010

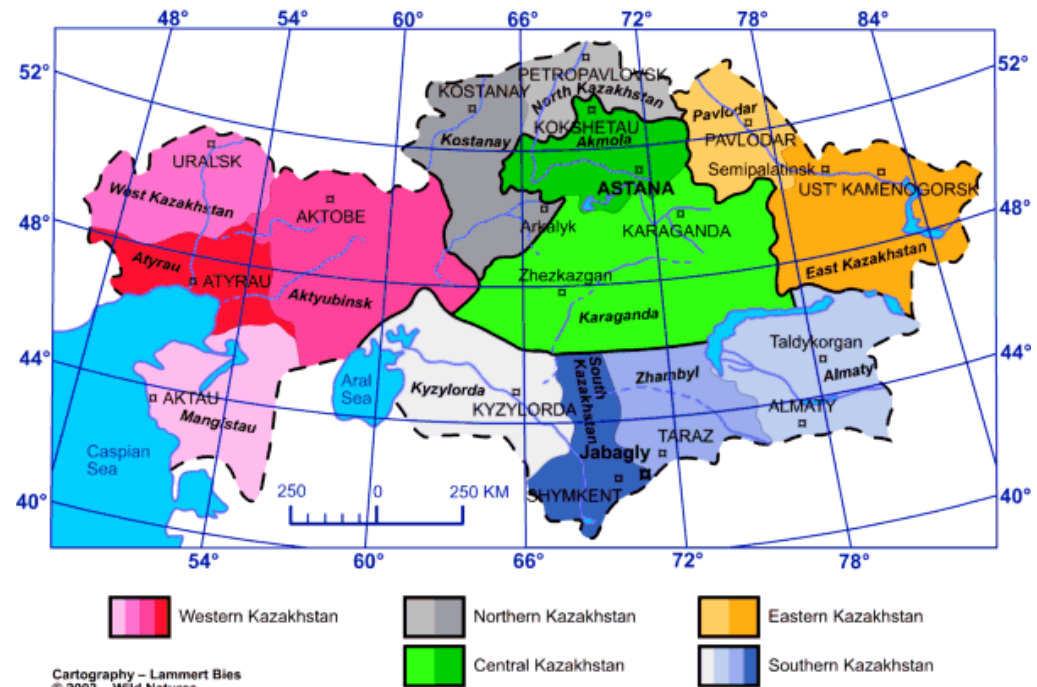
© 2010 Europa Technologies  
51°07'33.18" N 71°26'46.75" E elev 160 ft

Eye alt 283 ft

# Solution

- Summarize programs performance targets and projects
- Adapt it into the GIS software for monitoring

KAZAKHSTAN – 5 ECONOMICAL AND 14 POLITICAL REGIONS



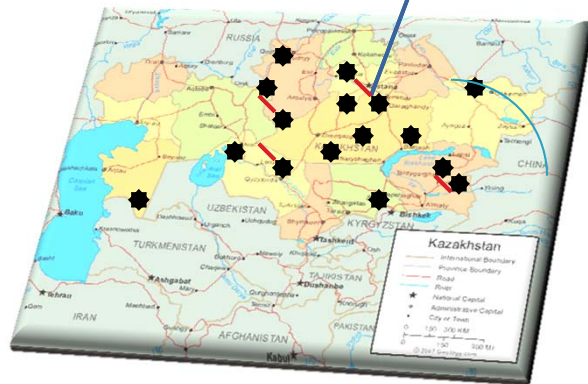
# GENERAL IDEA

- Create layers of **Programs**
- Create layers for **Agencies**
- Create layers for **Projects**



# CASE

## Layer of Projects



PROJECT	Mid capital repair of Local road Semei-Pavlodar
Description	A capital repair of the road between Semei - Pavlodar due to its unacceptable condition. Road length is 324 km, road category III
Type	- select
Responsible person	Road Committee, Ministry of Transport
Contacts	8701000000, mtkk@mtc.gov.kz
% of completion	5%
Tender Date	5-Mar-11
Number of bidders	12
Average bid	130,2
Contractor	ТОО "СТРОИ-РОД"
Winning price	125,4
Current stage	The bidding evaluation finished, the contractor selected, the advance payment is done, the preparatory works are finished.
Timing	January 2011 - December 2011
Schedule	<a href="#">download</a>
Cost	145,4
Project Economic CBR	2.43
Project NPV	240,4
Project IRR	18.50%
Other key responsible people	Mayor of Eastern Kazakhstan Province



# EXAMPLES OF GIS APPLICATIONS

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## PLANNING

- ▣ Budget prioritization (shortage planning)
- ▣ Asset management planning

## IMPLEMENTATION OF PLANS

- ▣ Monitoring projects and plans
- ▣ Monitoring coordination process

## NATIONAL MONITORING

- ▣ Monitor performance (delays on corridors, borders, export-import movements)
- ▣ Healthcare, education etc. situation analysis



# International examples



- Bappenas agency
- 2010 proposal
- Strong need
- 4 pilot projects
- Financial commitment
- GIS educated

# Implementation steps



- Create special GIS unit within the government structure
- Organize the work with international consultants with capacity building and launch pilot project
- Launch main project and educate the ministries and municipalities on GIS usage