

Obama's stimulus package -



Opportunities for geospatial?

The ongoing economic slowdown was born in the USA with the financial markets crashing and putting brakes on growth in various industries in the USA to begin with and later worldwide.

Having seen the contagious effects of the US economy on the rest of the world, there is now a strong realisation that fuel for the engines of growth of major technologies lie in the US; this being the case with geospatial technology as well. In this context, understanding how President Obama's economic stimulus package would aid the geospatial industry of the US, and thence of the world, is important. This may, to a certain extent, provide an insight in to the shape of the geospatial industry in times to come.

The economic stimulus or bailout package has come out in the form of the American Recovery and Reinvestment Act (ARRA) 2009, which the President signed in February. The act includes a combination of measures like tax cuts, additional spending on infrastructure and aid to individual US States.

The Act mentions the sectors to which the funds are to be allocated. Out of the 17 broad areas listed, Food and Farming, Defence, Energy and Environment, Government, Homeland Security, Transportation and Housing and Health and IT definitely appear to be areas where geospatial industry may look forward to a slice of the recovery pie.

The listing misses on the specifics that GIS industry would have wished to see, but this hasn't prevented speculation on

the prospects of the money coming to the rescue of the industry. Virginia-based MAPPs (Management Association for Private Photogrammetric Surveyors) has already put out an estimate that out of the total package, geospatial industry may expect over \$ 73 billion in programmes that will require geospatial data, technology, services and applications. Compiled by John "JB" Byrd, MAPPs Government Affairs Manager, the figures represent the identified areas of funding directed at geospatial or geospatial related tasks. These included agencies or departments that currently use or are potential markets for the use of professional geospatial services and activities. The figures are speculations and there may be more opportunities in the future. "There are things that you look at the first time and say, that's not really geospatial, but in fact they are. For example, this major health IT initiative in the bill (Act) will need epidemiology GIS", says MAPPs Executive Director John Palatiello.

The word 'infrastructure', in the preamble of the Act, has energised most of the players and those geospatial firms building solutions typically for this domain especially Transportation and Housing (construction) - seem to have their guns trained. Richard Zambuni, Global Marketing Director - Geospatial, Bentley Systems, puts it as "infrastructure projects create or support existing American design and construction jobs, and they stimulate manufacturing both domestically and abroad. This (package) is a perfect opportunity for the private sector and government agencies to use some of that money to invest in the latest generation of

geospatial technology that will help them work smarter. In some cases, we have special discounts available for projects that qualify under the ARRA 2009." It should be noted that different heads against which funds are specified under Transportation and Housing category of the Act are -

- Grants for highway improvements - \$29,000 mn
- Grants for capital investments in designated rail corridors - \$8,000 mn
- Public transit improvements and infrastructure investments - \$8,400 mn
- Repairs and modernisation of public housing projects - \$4,000 mn

Intergraph, another major geospatial industry player, too appears to be banking on the following figures in the package. John K Graham, President, Security, Government and Infrastructure (SGI) commented "Our company sees many areas in which stimulus money for geospatially-powered infrastructure and security projects will likely come into play. These could include utility projects like Smart Grid, transportation initiatives such as enhanced mass transit and airport security, and government initiatives ranging from environmental conservation to the FEMA hurricane evacuation system."

- Tactical communications equipment for customs and border Protection - \$ 60 mn
- Border security fencing and technology - \$ 100 mn
- Immigrations and Customs Enforcement information-sharing technology - \$ 20 mn

Description	Funds allocated (mn \$)	Estimated cost (mn \$)
Food and Farming	26,466	26,431
Defence	4,555	4,531
Energy and Environment	50,825	50,775
Government	6,858	6,707
Homeland Security		2,744
Transportation and Housing (T & H)	61,795	61,051
Health IT	17,559	17,559

Source: http://online.wsj.com/public/resources/documents/STIMULUS_FINAL_0217.html

- Explosive detection systems for airports - \$ 1,000 mn
- Funding for Coast Guard acquisitions and construction - \$ 98 mn
- Repairing and removing bridges hazardous to marine navigation - \$ 142 mn

While the above may provide some indications, another aspect of the 'economic recovery story' is seeing the geospatial technology itself as a solution. In some quarters, voices have been raised for building a 'national GIS' and that in-turn serving to mitigate recessionary effects. A paper on GIS.COM ('A Proposal for National Economic Recovery: An Investment in Geospatial Information Infrastructure



Building a National GIS') says that there is an immediate need to have a national GIS to properly manage and execute the efforts for reviving the economy in terms of monitoring the recovery process across various communities. It also says that 'a national GIS can be built immediately engaging hundreds of private firms. It will speed the start of job-rich infrastructure projects.'

Though there is no allocation in the package for such an activity, there still seems to be hope. According to Prof Michael P Peterson (Department of Geography, University of Nebraska), "It is clear that at least some of the money will fund the development of spatial data infrastructure."

Amin Kassam, President of Canada-based Amin Kassam and Associates,



The Act has the potential to revolutionise the geospatial infrastructure in the US and the world



voices a similar opinion when he says, "the bill (Act) has the potential for revolutionising the geospatial infrastructure in the US and as a consequence unleashing opportunities world-wide. Both underlying geospatial infrastructure concerns, such as the NSDI issues of more effective organisation and filling of gaps in the data, metadata and distribution/ access points (digital elevation model, parcel fabric, imagery, 3D data on built environment, ecosystems mapping, and access thereto), and the use of geospatial technologies within all aspects of the economic package (from building roads to schools and health-care) are in scope."

Though it will remain largely speculative, deriving business linkages out of the package should be the objective for the companies, with the current situation of the economy being what it is. As for now, one thing is sure to happen (Amin says this too). This funding will lead to more public-private partnerships and give a boost to innovation in the use of geospatial technology at the local, state and national levels.

The timeline of the ARRA states that from March first week, federal agencies would begin reporting use of funds. As the slowdown-hit geospatial organisations wait for these details, the recent statement of Ben Bernanke, Chairman, Federal Reserve says, "We will see the recession coming to an end probably this year," creates a modicum of hope. ■

Saurabh Mishra
saurabh.mishra@GISdevelopment.net