

# STREAMLINING TOOLS - TOOLS TO MAKE GOVERNMENT MORE EFFECTIVE and EFFICIENT

## ELECTRONIC PLANS SUBMITTAL, REVIEW, TRACKING AND STORAGE

### ABOUT THIS TOOL

"The slowness of the plan review process in several communities have caused our firm to delay our store openings by 2 ½ months – that is a loss of \$2.5 million in revenues per store. We welcome electronic plan reviews."

*Senior VP in charge of construction for a national retailer*

"Our jurisdiction today is accepting and reviewing building plans over the internet reducing the amount of time it takes to complete a plan review of a commercial building from five weeks to five days and saving some of our architects and contractors repeated 75 mile one way trips to the building department."

*Building Official, Osceola County, FL*

"Our objective is to more than meet the electronic customer at the door. This is about changing the way we do business to capture the same internal operational efficiencies that drove the private sector to technology."

*Dan Stapley, Maricopa County, AZ Supervisor and past President, NACo.*

Electronic plan review technology has come a long way in the past five years, from only a handful of jurisdictions using homegrown review systems to over 120 jurisdictions nationwide using software provided by a growing number of vendors. This tool identifies resources available on both the Alliance website and in state and local governments that your jurisdiction can use to both support your "green government" paperwork and carbon reduction initiatives and speed the construction of buildings getting them on your tax rolls sooner.

### BENEFITS OF USING

Jurisdictions now using electronic plan submittal, review, storage and retrieval technologies are compressing their overall plan review times from four months down to less than one and are significantly reducing the number of errors in plans being submitted by their customers and capturing new efficiencies in manpower, resources and environmental conservation. Moreover, they are serving their respective constituents better, stimulating economic recovery and improving their disaster preparedness, response and recovery capabilities.

### SAVINGS TO GOVERNMENT

- Enable jurisdiction to conduct more plan reviews, faster, more accurately and more cost effectively.
- Enable communities to conduct concurrent reviews amongst multiple agencies & provide approved electronic plans to field inspectors
- Reduce and ultimately eliminate paper storage, retrieval costs
- Get buildings up and on tax rolls sooner

### SAVINGS TO PUBLIC AND PRIVATE SECTORS

- Reduce number of trips to building department by making plan submission, tracking and updates accessible 24/7/365
- Typically cut in half the number of plan resubmissions for corrections
- Reduce by up to 70% amount of time it takes to get plans approved.

## CHALLENGES

- Get staff comfortable in reviewing plans electronically versus traditional full size paper sets.
- File formatting can have varying effects on software use for ePlan review. Example: Not all PDFs are created equal.
- Development of detail work process for ePlan review is required prior to implementing technology for ePlan review.

## BACKGROUND ON THIS TOOL

New plan review software allows architects and jurisdictions to review plans in multiple file formats ranging from PDF, to DWG and DWF. Some packages, such as Bluebeam PDF Revu, enable you to include links to model building code sections, either by creating and storing custom text markups with building code information, by hyperlinking to the code on your jurisdiction's website, or inserting a PDF page of the building code appended to the PDF drawing. Jurisdictions using ePlan review are generally reviewing plans using two side by side monitors - a large format monitor (34" or more) for plans and a smaller monitor (24") for code text and related document review. Storage is on CD-ROM's or in servers, often with off-site back up services holding duplicative files that can be readily retrieved in the event of a major disaster.

## EXAMPLES OF APPLICATION AND JURISDICTION CONTACTS

Plano, Texas (population 265,000) and Bend, Oregon (82,000) offer two divergent examples of the state of use of ePlan review technology. Plano serves its growing population by acquiring Bluebeam PDF Revu for its building department, requiring projects 10,000 square feet or larger to be submitted electronically and digitizing (scanning) every plan that is submitted for projects less than 10,000 square feet. Using PDF files, the city's plan reviewers are using two monitors to mark up plans with Bluebeam's redlining tools including text boxes, clouds, callouts and stamps. This electronic process enables the department to quickly return drawings and documents to the submitting architect so corrections can be made and revisions can be resubmitted. The city is looking at expanding its ePlan review system to sister agencies.

Bend, Oregon, one of the fastest growing jurisdictions in the nation, brought ePlan review technology into their building department in 2008 and within two years expanded it to the zoning and land use and public works departments. Every plan is digitized and approved electronic plans are shared with field inspectors via their ruggedized laptops, reducing field inspection as well as plan review time and increasing code compliance. As the downturn in the economy hit Central Oregon, Bend was able to offer its ePlan review services to aid nearby rural communities.

For more information contact: In Plano, TX – Anthony Han, [Anthonyh@plano.gov](mailto:Anthonyh@plano.gov); (972) 941-5128. In Bend, OR – Robert Mathias, Building Official, [rmathias@ci.bend.or.us](mailto:rmathias@ci.bend.or.us); (541) 330-4010

## SUMMARY AND OTHER RESOURCES

The fastest growing IT technology, electronic plan submittal, review, tracking and storage is saving jurisdictions and their clients and the environment by bringing this last key element of the building regulatory process into the digital age. As the building community speeds their design and construction processes using new Building Information Modeling technology, ePlan review provides jurisdictions a pathway into the use of automated plan checking tools now under development.

The Alliance website has two guides with additional detailed information on ePlan review.

A four page color "Elected Officials Guide To Enhance Public Safety & Economic Competitiveness Through IT in Building Department Plan Submittal, Review, Tracking and Storage," and a more detailed 22 page white paper, "From Paper to Digits – Steps to Take to Move Your Plan Submittal, Review, Tracking and Storage Processes into the Digital Age." Go to: [www.natlpartnerstreamline.org](http://www.natlpartnerstreamline.org) to download your copy.

FOR MORE INFORMATION ON THE ALLIANCE AND A COPY OF THIS TOOL: Visit the Alliance's website at:  
[www.natlpartnerstreamline.org](http://www.natlpartnerstreamline.org)