

Areas of Benefit Application

Mehmet "DJ" Kutsal, Information Systems Manager
Contra Costa County Public Works Department, Martinez, California

Abstract:

This application enables the user to revise the official Oracle inventory of parcels which are in Areas of Benefit (AOB) . This application is designed to be employed in two distinct sequential periods of operation; an "inventory" period and a "maintenance" period.

The primary reason the AOB application was developed was to ensure that the fees for capital improvements were assessed and collected properly for transportation and flood control improvements.

This application automates many procedures that would normally take a highly skilled GIS Analyst to complete. Speed in viewing, querying, and updating data is greatly enhanced. This application allows experts in other fields, such as accounting, to avail themselves to the latest Geographic Information Systems technology and to reap the benefits of the data that GIS Departments maintain.

Introduction:

A County's main charter is to fulfill the role of local government in unincorporated areas. In a County where there remains land to be developed, a County Public Works Department's (PWD) role is to prepare the way for development to take place. Basically, a County PWD is responsible for putting in place the infrastructure for development to begin. In the case of Contra Costa County (CCC), the PWD is responsible for planning, providing for, and overseeing the construction of the transportation and drainage infrastructure so that development can take place. Being the largest County in the Bay Area with the largest amount of developable land, the PWD stays very busy.

However, along with the rest of California since Proposition 13 limited property taxes, and for that matter, the rest of the country, CCCPWD also faces the shortage of available funds to build the necessary preliminary infrastructure projects. In order to alleviate some of this financial stress, developers are required as a condition of approval of their developments to pay capital fees such as fire, school, park, traffic and drainage.

Background:

The County of Contra Costa, California was incorporated in 1850 as one of the original 27 counties of the State of California, with the City of Martinez as the County Seat. It is one of the nine counties in the San Francisco-Oakland Bay Area. The County is the ninth most populous county in California, with its population reaching approximately 930,000 as of January 1, 2000.

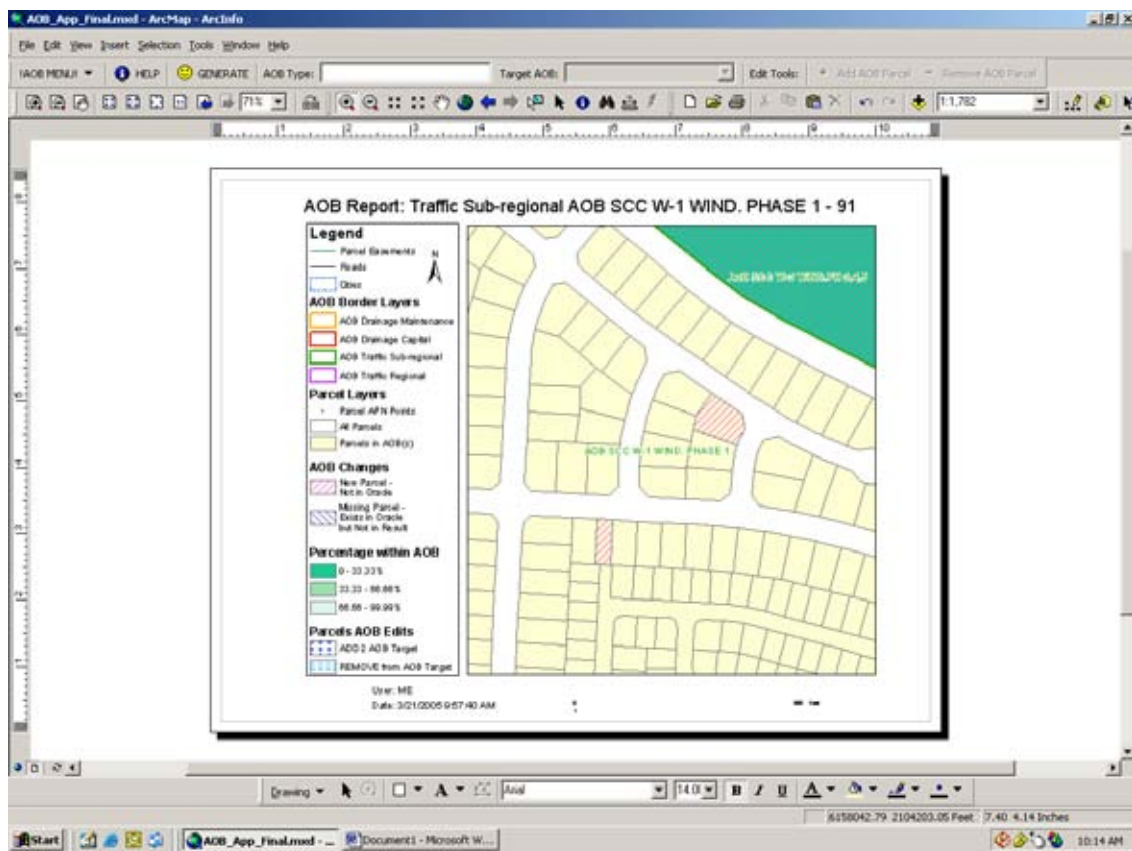
The infrastructure improvements made by a PWD generally impact a broad area and not just a specific piece of property. As a result, the costs of making these improvements should be borne by all of those who benefit. There is also a timing issue in that since the infrastructure improvements are made ahead of the development going in, the costs corresponding to the benefits that will be received by the individual parcels needs to be planned for and collected

ahead of that development. This is generally done at the time of filing of the subdivision map or at the time of issuance of the building permit.

To accomplish this, Areas Of Benefit (AOB) were analytically defined by staff according to long-term improvement plans and adopted by the Board of Supervisors in Contra Costa County. This basically fixes the boundaries of the AOB so that there is equity in how much of the costs are passed on to each property. Also, since there can be numerous improvements that can impact a particular property, the calculation of these fees can be quite complicated.

What the AOB GIS Application Does For Us:

As currently written, AOB refers to Traffic and Drainage Areas of Benefit. All parcels within each AOB are charged the same fee for each permit type (i.e. Single Family, Multifamily, Retail, Commercial, Industrial) at building permit issuance. There are several hundred thousand parcels in Contra Costa County and the AOB GIS application provides a quantum level greater efficiency than our old paper assessor maps.



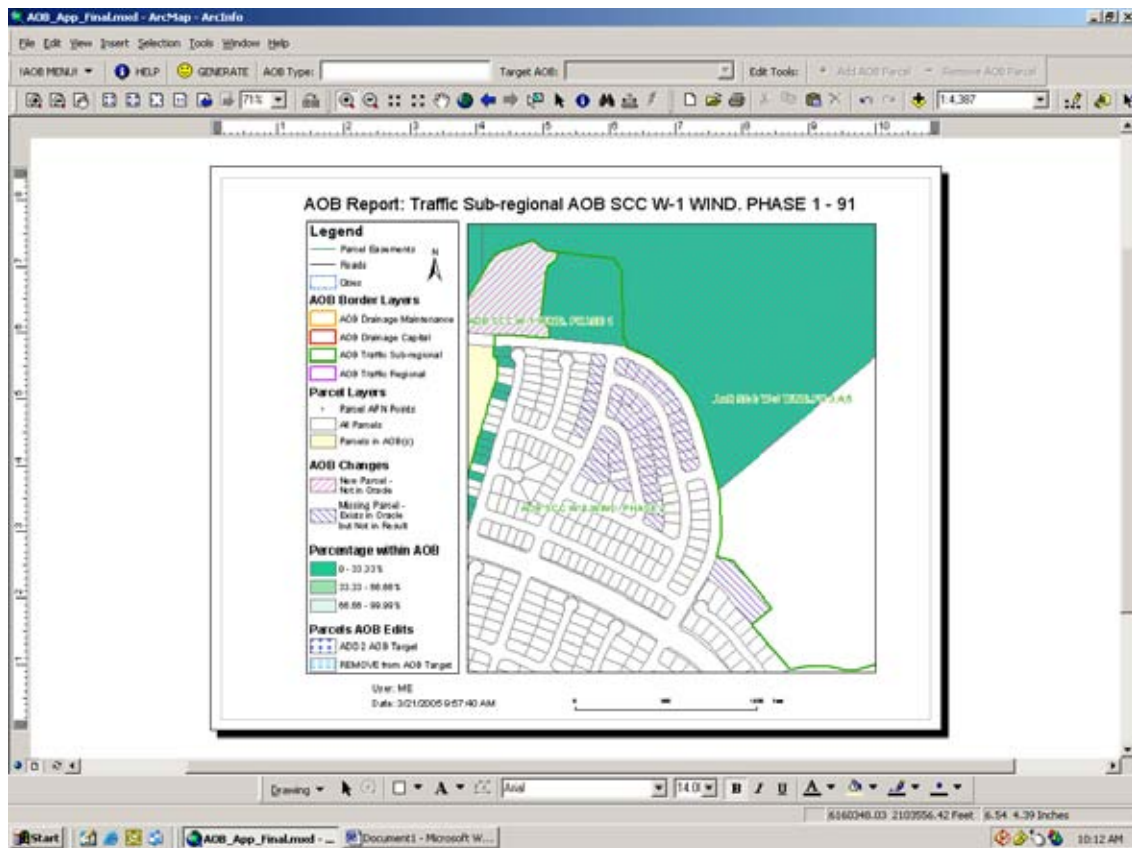
The AOB GIS Application allows us quick verification of which AOBs any given parcel belongs to. Some of our parcels are in as many as eight (8) AOBs. Usually this is a mixture of Traffic and Drainage Areas plus some areas such as the Discovery Bay West, which has parcels with multiple Condition of Approval fees in common.

The AOB GIS Application helps us visually verify location of parcels spatially within county for quick reference. Often when we see where a parcel lies we can tell if there may be any issues or we can eliminate the possibility at a glance.

The AOB GIS Application allows us great certainty that our quote of fees was made properly since we can see where the parcel lies relative to any AOB boundaries or city/county boundaries.

The AOB GIS Application allows quick check that all parcels within any given AOB boundary are listed in the database as being in the boundary. If the database has dropped a parcel from a given AOB due to retirement and/or splitting of the old parcel, the parcel not in the AOB shows up in a different color; quick and obvious.

The AOB GIS Application gives several color codes for parcels that are partly in and partly out of a given AOB boundary. This allows us to focus on parcels with the greatest level of error probability when using visual error checking.



The original Boundary lines Layers for most of our AOBs were drawn for graphic representation and not along parcel lines and not necessarily exactly contiguous with one another. This resulted in slightly overlapping boundaries or slight gaps between boundaries. This manifests itself in the parcel set as showing the parcel in two AOBs in the case of overlapping boundaries and being completely outside an AOB in the case of large enough gaps. With a standard close in zoom function, the gaps or overlaps are clear and can be easily fixed.

Conclusions:

The ultimate goal of any government agency is to ensure that the best use of public funds is made and that this is done in a fiscally prudent and fair manner. Having the AOB application available to staff allows them to make sure that all of the appropriate fees are calculated and collected

because these funds can then be available to improve the next set of projects. This is what allows healthy growth in the region.

The ultimate goal of any quality improvement process at a County is to improve customer service and this project has accomplished that by making sure that the fees associated with the permitting process to cover the costs of the infrastructure improvements that make the developments possible are accurate and can be collected in a timely manner.

Acknowledgements:

I would like to acknowledge the contributions of a number of Department staff to this project and in particular, the Department would like to recognize the indispensable involvement of the following individuals:

Frank Scudero, Accounting Division
Dennis Chebotarev, Computer Services Division, Data Management Team
Chris Hallford, Computer Services Division, GIS Team
Al Gibbs, Computer Services Division, GIS Team

Author Information:

Mehmet "DJ" Kutsal
Information Systems Manager
Public Works Department

Contra Costa County
255 Glacier Dr.
Martinez, CA 94553

Phone : (925) 313 – 2307
FAX: (925) 313 – 2333

mkutsal@pw.co.contra-costa.ca.us