

# City Fusion™

## A GIS-Based Municipal Management System

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### **City Fusion Goals:**

1. Establish and maintain an inventory of existing municipal infrastructure.

2. A Geographic Information System (GIS) must be a component of the overall system to provide integrated analysis and maintenance planning on a citywide basis.

3. Capture information on the condition, utilization and functionality of the infrastructure in a standardized format.

4. Facilitate priority setting for infrastructure upgrading and/or replacement on a needs-driven basis.

5. Facilitate sharing of information related to the various types of infrastructure.

6. Integrate existing and new core applications used by all departments.

7. Integrate financial information needed to comply with GASB-34 and facilitate decision-making.

8. Providing internal and public access to information thru the web.

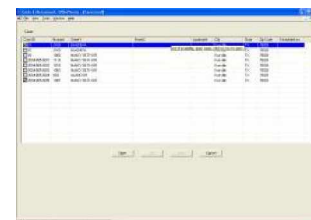
## Code Enforcement at the City of Kerrville

The City of Kerrville is a growing community in the heart of the Texas Hill country.

To better serve the public and private sectors, and meet increasing demands on its resources, the City's staff decided to leverage GIS technology to better enforce city ordinances using interactive mapping.

Data from Code Enforcement inspections had to be integrated.

The GIS/Code Enforcement integration allow city staff to view, understand, question, interpret, and visualize data in ways simply not possible in the rows and columns of a spreadsheet. Maps make patterns easy to see and are a better analysis and decision-making tool.



Code	Description	Value	Unit
100	...	...	...
200	...	...	...
300	...	...	...
400	...	...	...
500	...	...	...
600	...	...	...
700	...	...	...
800	...	...	...
900	...	...	...

### The Challenge

The City of Kerrville needed to address several basic needs:

1. Make use of the existing GIS data;
2. Manage the growth of the city with an integrated permitting and code enforcement system;
3. Utilize mobile technology to capture and transfer data collected from field based work activities;
4. Use the Web to make these applications available on the city Intranet and Internet; and
5. Facilitate decision making by using the intuitive power of

maps to reveal trends, patterns, and answers that are not as easily detected in other data presentation formats.

# City Fusion™ – Code Enforcement



## The Solution

The City professional staff working with the Data Fusion's GIS and software development team decided to customize the City Fusion Code Enforcement application to better reflect the business processes of the Code Enforcement department.

After several requirements definition and business process mapping sessions, the Data Fusion

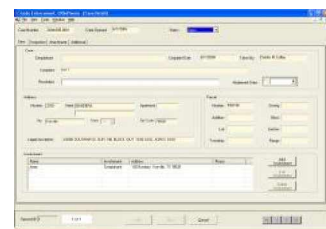
team implemented the system.

In order to fully integrate the new application to the GIS system, the cadastre data was made the core of the Code Enforcement database.

The case intake with all its related reference data has to be available in a networked office environment and in a field environment.

The inspectors have to be able to print notices in the field and collect inspection results, attach photos and any support document.

Database synchronization will take place once the inspectors log back into the city network.



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*“data Integration is key to managing city assets and services.”*

## The Process and the System

The final system includes all the functionality needed by the inspectors to do their job.

The system runs in a Client/Server architecture when networked and in stand-alone application mode when detached

from the network. Database synchronization is done when network connection is re-established.

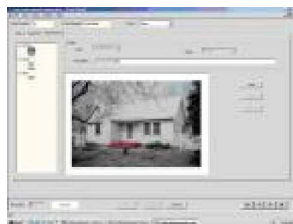
The system was built using the .Net architecture. The data is stored in an MS SQL

Server database or in MS Access.

The notices and letters are printed in the field on a wireless printer.



## Data Fusion Technologies, Inc.



Data Fusion Technologies is an Engineering and Information Technology consulting firm based in Austin, Texas.

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