IBM Smarter Cities Report
Core Recommendations:

1. Develop an integrated regional data management system.
2. Improve Homeless Management Information System (HMIS) capabilities.
3. Establish coordinated data entry.
4. Expand coordinated assessment.
5. Develop and common mobile/web application.
7. Create a governance framework.
8. Establish a change management plan.
9. Expand the use of outcome-based metrics.
10. Drive innovation.
Findings –

• Greatest impediment to addressing the challenge is fragmented nature of assistance efforts and related data

• Services in the region segmented

• Cities and counties in the area recognize the benefit of a more coordinated and collaborative approach

• Denver metro region known for taking a regional approach to major policy and infrastructure challenges, and it will need to do the same with the issue of homelessness

• Success will require disciplined governance and change management
The Challenge:
Design an integrated system for efficiently coordinating the delivery of services to those experiencing homelessness and to at-risk populations through many providers across a multi-county region.

Summary of recommendations:
- Develop an integrated regional data management system
- Improve Homeless Management Information System (HMIS) capabilities
- Establish coordinated data entry
- Expand coordinated assessment
- Develop a common mobile/web application
- Build social communities
- Create a governance framework
- Establish a change management plan
- Expand the use of outcome-based metrics
- Drive innovation
The challenge in the Denver metro is to design an integrated system for efficiently coordinating the data collection, analysis, sharing and reporting needed to deliver services for those experiencing homelessness and at-risk populations across a multi-county region that includes 2.9 million people, 56 local governments and hundreds of private and nonprofit service organizations.
Along the bottom of both maps are the essential foundations for the entire process.

- “Serve” includes the great work of many service providers.
- “Measure” begins when the person’s information is entered into the system, tracks them throughout their journey and maintains a connection for up to three years after being housed.
- “Systems” refers to the new integrated data management system, the standard HMIS and the CAHPS processes, all of which help ensure systems of record remain accurate.
Although they are fictional, these maps express important realities about the journeys homeless populations make to finding housing. They tell similar stories about two very different people, demonstrating the following:

- How simplified and linked processes reduce stress on those experiencing homelessness and improve outcomes
- How coordinated services reduce costs and improve effectiveness for the providers
- How reportable data allows stakeholders and funders to track progress and to ensure future investments are targeted effectively
Develop an Integrated Regional Data Management System:

For clients:
• Single input of case history data that is shared across housing and human services providers,
• Quicker receipt of services because caseworkers have comprehensive view of client case histories
• Safe storage of identification documents needed to apply for services

For service providers:
• More staff time spent serving clients and less time spent finding and managing data
• Improved ability to quickly understand and meet client needs
• Better overall understanding of program effectiveness

For policymakers and funders:
• Faster data quantification/analysis (from weeks to hours)
• Better use of limited resources
• Improved ability to prevent homelessness through predictive analytics
Improve HMIS Capabilities:

For clients:
• Common data with all service providers
• Additional time with caseworkers

For service providers:
• More time spent serving clients vs. entering data
• Higher quality and more-timely reports
• Improved understanding of program performance
• More-effective coordination of services across agencies

For policymakers and funders:
• Less effort to maintain the system and supply HUD-required reports
• Access more complete and timely information on regional services
• Improved demonstration of outcomes
Figure 6: Architecture of a Homeless Management Information System (HMIS), including Coordinated Assessment and Housing Placement System (CAHPS)
Establish Coordinated Data Entry:

For clients:
- Simplify process of obtaining services
- Provide access to multiple programs through one process
- Reduce time and effort required to locate and register for services

For service providers:
- More time serving clients and less time spent gathering information
- Improved coordination of services across agencies to better meet individual client needs
- Less time spent on duplicate data entry

For policymakers and funders:
- Improve coordination and reduce fragmentation
- Establish a trusted source of data about people seeking help and their needs
- Identify current gaps (and predict future ones) in service availability
Expand Coordinated Assessment:

**Scope:**
The Denver metro region should proceed with the planned migration to Homelink and expand the assessed populations to include youth and families.

**Expected outcomes:**
The region will allocate resources more effectively using standardized criteria, improve matching of housing and services with individual and family needs and better identify gaps between assessed needs and existing social services and housing infrastructure.
Figure 7: Steps in the coordinated assessment process

1. Coordinated assessment survey is conducted.
2. Results are assessed to triage services.
3. Person is connected to level of service needed.
4. Training conducted to make the landlord and tenant match sustainable.
5. A good landlord is identified, and the tenant is connected to a housing unit.
6. Lease signing is attended by client and their support network.
Develop a Common Mobile/Web Application:

**Expected outcomes:**

This recommendation will benefit the region in the following ways -

1. Clients can easily identify specific services through the app or a conversation with a live agent (such as a 211 operator).
2. Standardized data can be fed into the integrated data warehouse.
3. Outreach workers can use a mobile device to capture or view client information.
4. Those most at risk of homelessness could receive immediate assistance to help prevent them from becoming homeless.
5. Collected data could be used to analyze future services and funding.
Build Social Communities:

Expected outcomes:

For clients:
• Shared availability of resources for those seeking services
• Virtual support groups among those experiencing homelessness
• General information and education

For service providers:
• Sharing best practices among organizations pursuing similar objectives
• Identification of emerging issues, concerns and successful programs

For volunteers and funders:
• Building community awareness and involvement
• Analysis of social platform usage data
• Analysis of social communities to identify gaps in services and direct funds accordingly
Create a Governance Framework:

**Step 1:**
Develop and empower a steering committee to review and select the appropriate recommendations in this report and to commit to specific outcomes for the community.

**Step 2:**
Establish a board of experts (including service providers, funders, county HHS executives and so on) whose members are independent and have subject matter expertise that will help the steering committee review and monitor the progress of the roadmap.

**Step 3:**
Work groups and their respective leaders should be established by the steering committee to lead the execution of individual recommendations.
Establish a Change Management Plan:

Key change dynamics in the Denver metro region include the following:
• How change will affect various constituencies (clients, service providers, administrators and so on)
• What the key challenges will be
• What likely responses will emerge as changes are implemented in the region (see Figure 8)

Best practices for change management include the following:
• Leveraging fundamental, pragmatic steps to assist leaders with significant change:
  – Articulate the vision
  – Involve leaders
  – Engage and prepare stakeholders
  – Align the organization
  – Monitor results
• Plan the specific change management activities to integrate into each phase of the initiative (see Figure 9)
Purposely managing change helps people commit to and, ultimately, adopt a change.

Figure 8: Responses to organizational change over time
Figure 9: The change management lifecycle
Expand the Use of Outcome-Based Metrics:

**Expected outcomes:**

- Programs measure the impact on the person they are serving.
- Program benefits can be celebrated and replicated more easily.
- Program success will be measured more accurately.
- Funding and resources will be allocated to more-effective programs.
- There will be transparency in performance and accountability for results.
- Regional service providers will likely be prioritized by funders.
Figure 10: Performance management framework

**Activities**
- Street outreach
- Housing placement and subsidies
- Tenant support
- Assertive Community Treatment (ACT) team visits
- Treatment

**Inputs**
- 25 rent subsidies
- Landlord relationships
- ACT street outreach team
- Property management staff

**Outputs**
- 30 clients served
- Average 23 contacts before housing placement
- 83% received rent subsidies
- Average 25 ACT contacts/month after placement

**Outcomes**
- 93% placed in permanent housing
- 67% housed > 6 months
- (100% of those placed still housed)
- 40% improved behavioral health
Drive Innovation:

1. Leverage collected data and outcome-based metrics to attract more funding to the region.

1. Build cognitive or intuitive models to identify opportunities for creative forms of program intervention and need prevention.

2. Expand provider collaboration to deliver improved outcomes more quickly.
The Denver metro region has a strong history of coming together to address tough issues through policy and investment. By implementing the recommendations in this report and by continuing to work to make more affordable housing available, the region can make a substantial impact on homelessness. However, success will require disciplined governance and change management.

When implemented, these recommendations will improve service to clients, increase the ability to quantify the impact of specific investments, help ensure more-efficient use of limited resources and help reduce homelessness.

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