Data Mining in Westminster

RMLUI

March 5, 2020

Stu Feinglas
Who is Westminster?

- 115,520 population (2017 ESRI Analyst)
- 134,193 water service population
- 32,500 WATER CUSTOMERS
- 34 square miles
- Between Denver and Boulder on US Hwy 36 corridor
## Historic Growth of Westminster

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>235</td>
</tr>
<tr>
<td>1930</td>
<td>436</td>
</tr>
<tr>
<td>1940</td>
<td>534</td>
</tr>
<tr>
<td>1950</td>
<td>1,686</td>
</tr>
<tr>
<td>1960</td>
<td>13,850</td>
</tr>
<tr>
<td>1970</td>
<td>19,512</td>
</tr>
<tr>
<td>1980</td>
<td>50,211</td>
</tr>
<tr>
<td>1990</td>
<td>74,625</td>
</tr>
<tr>
<td>2000</td>
<td>100,940</td>
</tr>
<tr>
<td>2010</td>
<td>106,144</td>
</tr>
<tr>
<td>2017</td>
<td>115,520</td>
</tr>
</tbody>
</table>
The Long, Hot Summer of ‘62
Cooperation is Often BORN of Adversity and NEED
Data Mining Through the Years
Developed vs. Developed

- Community Development
  - Approved active ODP

- Public Works & Utilities
  - Built and fully occupied
  - 2 – Years full water use
DEVELOPING A COMMON LANGUAGE

Community Development
Vacant Residential Land

Public Works & Utilities
Undeveloped Land
Tap Fee Water Use

- Based on business type
- Charged per “Service Commitment” 140,000 annual gallons
- $13,963 based on $32,500/AF 2018

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Units</th>
<th>Unit Use * (gal/unit/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Service &amp; Repair</td>
<td>sf</td>
<td>21.7</td>
</tr>
<tr>
<td>Car Wash</td>
<td>bay</td>
<td>2,100,000 (15 SC)</td>
</tr>
<tr>
<td>Childcare</td>
<td>sf</td>
<td>60</td>
</tr>
<tr>
<td>Church</td>
<td>sf</td>
<td>31.5</td>
</tr>
<tr>
<td>Clubhouse/Pool</td>
<td>unit</td>
<td>140000 (1 SC)</td>
</tr>
<tr>
<td>Grocery Store</td>
<td>sf</td>
<td>38.5</td>
</tr>
<tr>
<td>Gas Station no Car Wash</td>
<td>sf</td>
<td>242</td>
</tr>
<tr>
<td>Hospital</td>
<td>sf</td>
<td>59.97</td>
</tr>
<tr>
<td>Hotel/Motel</td>
<td>room</td>
<td>23566</td>
</tr>
<tr>
<td>Medical Office</td>
<td>sf</td>
<td>35.7</td>
</tr>
<tr>
<td>Multi-family</td>
<td>unit</td>
<td>69925</td>
</tr>
<tr>
<td>Office</td>
<td>sf</td>
<td>8</td>
</tr>
<tr>
<td>Recreation w/ pool</td>
<td>sf</td>
<td>148.8</td>
</tr>
<tr>
<td>Recreation w/o pool</td>
<td>sf</td>
<td>55</td>
</tr>
<tr>
<td>Restaurant</td>
<td>sf</td>
<td>200</td>
</tr>
<tr>
<td>Retail</td>
<td>sf</td>
<td>29</td>
</tr>
<tr>
<td>School</td>
<td>sf</td>
<td>12.4</td>
</tr>
<tr>
<td>Senior Housing includes irrigation</td>
<td>unit</td>
<td>0</td>
</tr>
<tr>
<td>Warehouse/Industrial</td>
<td>sf</td>
<td>7</td>
</tr>
</tbody>
</table>
Comprehensive Plan

Figure 2-2: Land Use Diagram

Legend
- Residential R-1
- Residential R-2.5
- Residential R-3.5
- Residential R-6
- Residential R-8
- Residential R-10
- Residential R-36
- Traditional Mixed Use Neighborhood Dist.
- Mixed Use
- Mixed Use Center
- Retail Commercial
- Service Commercial
- Office
- Office/R&D Low Intensity
- Office/R&D High Intensity
- Fuel/Light Industrial
- Public/Quasi-Public
- Public Parks
- City Owned Open Space
- Golf Courses
- Private Parks/Open Space
- Major Creek Corridor on Non-Public Land
- City Limits
- Water

Updated 6/3/14
WATER SUPPLY PLAN

Percent of Water Supply

- Farmers' High Line Canal: 40%
- Croke Canal: 18%
- Church Ditch: 13%
- Western Slope: 12%
- Reclaimed Water System: 10%
- Exchanges: 7%
Comprehensive & Water Supply Plan

New Development
Redevelopment
Revitalization
MUNICIPAL WATER SUPPLY PLANNING

1. Estimate Future Demand for Water
2. Calculate Future Water Supply for Average, Wet, Dry Years
3. Compare Demand to Supply Projections
4. Estimate Future Water Supply "gap"
5. Plan and implement strategy to close the “gap”
6. Recommend rebalancing land use and water supply if needed

City Council Policy
Vision for the Future
Comp Plan

What is Worst Case?
Computer Modeling
Engineering Analysis
Drought

City policy decisions made on land use and water supply.
THANK YOU

Stu Feinglas
City of Westminster - Retired