

The background is a topographic map showing contour lines and street names. The map includes labels for 'Gravel Pit', 'Selman Reservoir', 'Fork', 'Spring', and 'Theur'. Street names include 'Sands Dr', 'Sahara Dr', 'Lynne Ln', 'Terra Linda', 'Panora', 'Doris Wy', 'Albright', 'Melodie', 'Arcadia Ln', 'Ribbon Ln', 'Kayland', 'Waldo Dr', 'Gresthill Dr', 'Kline Ave', '4675 S', 'Sycamore Dr', 'Holly Ln', 'Hugo Ave', 'Delmont Dr', and 'Sycamore Ln'. Zoning codes such as 'R-2-8', 'R-1-8', 'R-2-8', 'R-1-10', 'R-M', 'R-M', and 'R-2-10' are also visible.

Municipal Infrastructure Planning & Cost Model

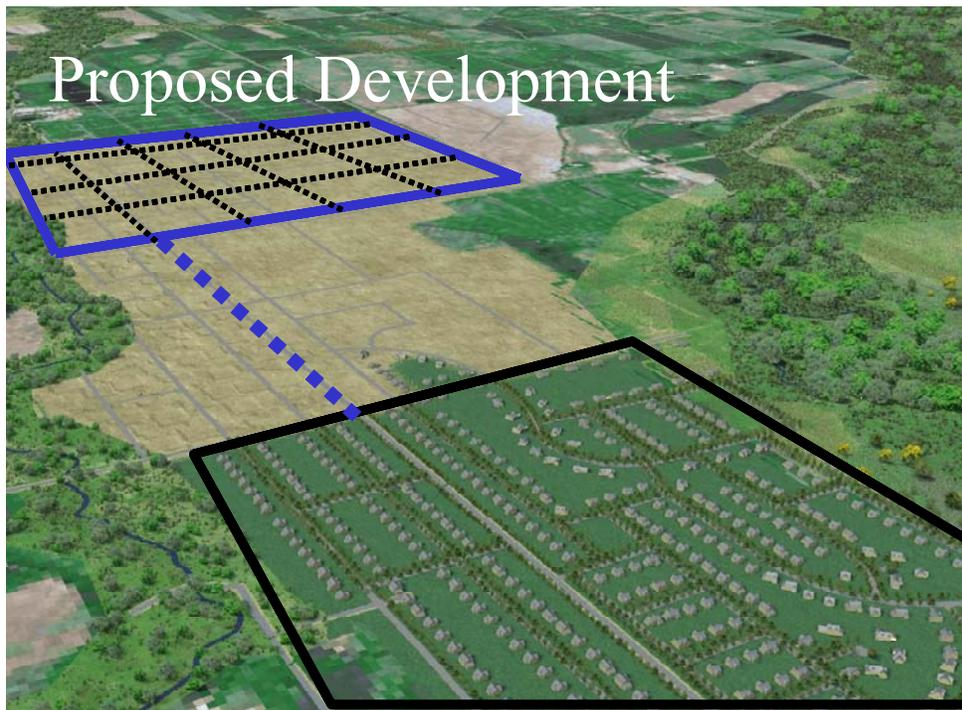
project overview

MIPCOM is a free, easy-to-use computer spreadsheet that estimates a community's costs for providing basic infrastructure to new development. MIPCOM estimates the amount of materials (streets and pipes) and labor needed to provide basic services to the new development. A planner simply enters data about their community and a proposed new development project, and MIPCOM "crunches the numbers".

Municipal Infrastructure Planning & Cost Model

MIPCOM is an application designed under the direction of the Quality Growth Efficiency Tools (QGET) Technical Committee to assist communities in evaluating and planning for the installation and maintenance of municipal infrastructure such as roads, curbs and sidewalks, water and sewer lines, and other basic utilities and services. Initially developed to estimate growth costs for the QGET Quality Growth Baseline Scenario for the Greater Wasatch Area, it has been adapted to a single-community scale and made available to communities throughout Utah to assist in the evaluation and development of efficient infrastructure planning.

Using this model, multiple scenarios of community growth may be considered to give local officials and professionals a concept of infrastructure costs over time and through different development styles. MIPCOM is a simple spreadsheet that requires only basic geographic data that can be obtained with a map and ruler and demographic data from the 2000 Census that is available through GOPB's Demographic and Economic Analysis section. The model then requires some detailed information regarding the community's existing infrastructure that should be available through that office's engineers, planners, and service providers. The results of the spreadsheet's calculations can then be used by community planners, elected officials, and concerned citizens to evaluate the costs and benefits of current and proposed developments and growth patterns.



Existing Development

“The State is going to support the preservation of critical lands. We are going to be expanding and supporting home ownership, we’re going to support housing availability and we’re going to support, in terms of policy, an effective development of infrastructure and the efficient use of land ... However, the State will not financially subsidize and support sprawl.”

- Governor Michael Leavitt
10/18/98

What will all these new roads and pipes cost the city?

This model was developed by the State in recognition of the part state funds play in municipal infrastructure management. The State is dedicated to efficient use of funds and resources and encourages communities to use the funds made available to them in the same manner. MIPCOM demonstrates that development styles can influence infrastructure costs. By using the model to evaluate different development scenarios, communities can more fully understand if they are assessing appropriate utility rates, property taxes, and impact fees. GOPB is distributing MIPCOM via the office web page as well as by e-mail and through educational gatherings to state, county, and community officials and planners around the State of Utah. To date, over 200 copies have been distributed locally with requests from around the country. Free, detailed training is offered to any Utah community that requests it.

Feedback from users is being collected in order to refine the application's functions and performance. Future steps in program development include upgrading the model to make it more user-friendly. Envision Utah has contracted with PSOMAS Engineering, one of the original developers of MIPCOM, to couple the tools and functions of the original MIPCOM with a newer and simpler interface. This new version will be available to the public by early 2004. A planned future step is to gather and publish data detailing the monetary amounts different communities and service providers around Utah can save by implementing Quality Growth Strategies and encouraging efficient infrastructure development. In turn, it could then be demonstrated how these savings can be passed on to the State by reducing the amount of tax dollars spent on the construction, maintenance, and repair of inefficient road, water, and sewer systems. Other refinements being pursued include further communication with service providers to determine and update appropriate measurements for communities with multiple services and an element to include specific redevelopment percentages for a community to measure infill and account for the accompanying infrastructure costs.

MUNICIPAL INFRASTRUCTURE PLANNING AND COST MODEL										INFRASTRUCTURE SUMMARY		
8/7/02												
CITY: WOODS CROSS										Objective: No Annexations		
Component	Scenario: Year 2002 Base					Scenario: Year 2010 Base					Increments	
	Connection Factors	Lengths (Ft)		Replacement Values		Connection Factors	Lengths (Ft)		Replacement Values		Ft	Cost
		Total	Per DU	Total	Per DU		Total	Per DU	Total	Per DU		
Streets & Roads	80%	330,916	154.5	\$ 13,793,625	\$ 6,440	80%	357,260	136.9	\$ 15,674,302	\$ 6,005	26,343	\$ 1,880,677
Arterial Roads	25% Imp	13,924				75% Imp	34,598				20,674	
Water System*	85%	269,084	125.6	12,238,805	5,714	85%	298,149	114.2	13,589,183	5,207	29,065	1,350,377
		73%										
Sewer System*	70%	243,849	113.8	10,018,540	4,677	70%	260,853	99.9	10,808,784	4,180	17,004	890,244
		81%										
Secondary Water	95%			5,813,433	2,714	95%			6,454,862	2,473		641,429
Cost Factor	50%					50%						
		Subtotals		\$ 41,864,403	\$ 19,545		Subtotals		\$ 46,627,130	\$ 17,865		\$ 4,762,727
C, G & SW	90%	495,395	231.3	6,935,526	3,238	90%	560,033	214.6	7,840,461	3,004	64,638	904,336
Storm Sewer	75%	182,887	85.4	7,315,466	3,415	75%	195,640	75.0	7,825,585	2,998	12,753	510,119
Org Utilities	90%	247,697	115.6	15,976,479	7,459	90%	280,016	107.3	18,061,063	6,920	32,319	2,084,584
* Do not include Treatment Facilities.		Totals		\$ 72,091,873	\$ 33,656		Totals		\$ 80,354,239	\$ 30,787		\$ 8,262,366