

Memorandum

Date: September 16, 2008

To: City of La Pine City Council

From: DJ Heffernan

Cc: Christine Nelson, City of La Pine
Mark Radabaugh, DLCD

Re: Land Use and Cost Assumptions for La Pine Fiscal Alternatives Analysis

Overview

This memorandum documents assumptions for future land use scenarios and related assumptions for growth in tax revenue and cost of services for the City of La Pine. The information will be used to analyze differences at the margin between the scenarios and financial implications for the city. The purpose is not to provide revenue and cost forecasts for budgeting purposes but rather to provide a basis for examining how land use policy decisions regarding future development may affect city finances. Some analysis parameters are quantitative (i.e. they result in dollar-based comparisons for each land use scenario) while others are qualitative (i.e. they result in estimated levels of impact such as high, medium, and low) relative to service delivery costs and tax revenue.

Population and Housing Needs Analysis

The estimated number of new housing units needed between 2007 and 2025 is based on Deschutes County population projections for the City of La Pine. The population growth rate was assumed to be 2.2% annually, the same as unincorporated Deschutes County. The number of new households was determined using an average household size of 2.5 persons per household, based on the 2000 Census for the City of Redmond. The number of housing units needed to accommodate new households was determined by adding a vacancy factor of 5% above projected household formation forecast.

YEAR	POPULATION	Households (2.5 avg HH size)	Dwelling units (5% vacancy rate)
Incorporation Nov. 7, 2006 <i>* PSU Estimate (July 1, 2007)</i>	1,585	634	666
	1,590	636	668
	1,625	650	682
	1,661	664	698
2010	1,697	679	713
	1,735	694	729
	1,773	709	745
	1,812	725	761
	1,852	741	778

YEAR	POPULATION	Households	Dwelling units
2015	1,892	757	795
	1,934	774	812
	1,977	791	830

	2,020	808	848
	2,064	826	867
2020	2,110	844	886
	2,156	863	906
	2,204	881	926
	2,252	901	946
	2,302	921	967
2025	2,352	941	988
	2,404	962	1,010
	2,457	983	1,032
	2,511	1,004	1,055
	2,566	1,027	1,078
Net increase 2007 - 2025	976	391	410

Land use scenario development

Four draft scenarios for future land use and development patterns were developed based on the number of new housing units needed. The scenarios make use of parcel and zoning data provided by Deschutes County. Existing zoning allows for far more housing and commercial growth than is projected for the City through 2025 and consequently no expansion of the city is anticipated. The scenarios also do not alter existing zoning with one small exception noted below. Instead, the scenarios make different assumptions about which undeveloped parcels will be built on and at what density new development occurs. The undeveloped parcels were identified based on assessors' data about the types of structures on property in the city. Properties with only accessory structures were counted as undeveloped. The assumptions used for each of the draft scenarios are explained below.

Base Case

All lots of record too small to subdivide are developed with a single structure, with 5% as duplexes. The determination of which lots were unlikely to subdivide is based on parcel size and zoning:

- In the La Pine Residential, La Pine Neighborhood Residential Center, and La Pine Neighborhood General Residential zones, lots under 1.5 acres are considered less likely to subdivide.
- In Wickiup Junction, lots under 2.5 acres are considered less likely to subdivide.
- In the Rural Residential (RR10) zone, lots under 10 acres are too small to subdivide.

The above residential development pattern would leave a housing deficit so the remaining units needed are built as subdivisions on larger vacant parcels in the La Pine Residential zone at the maximum lot size (15,000 sf), with 20% of the lot area set aside for public use and ROW. All units in these new subdivisions are assumed to be single-family homes (i.e. no duplexes).

For industrial employment lands, we assumed that the current ratio of developed industrial to residential land would hold. For commercial land, we assumed existing service businesses would hold a competitive advantage and not face added competition until the city reaches a population of _____, after which future commercial development would occur at half the current ratio. We assumed this same employment land development pattern for all scenarios.

Rural Community

In this scenario, not all lots of record are developed. The following assumptions regarding parcel size and zoning were used to determine which lots would develop:

- In the Rural Residential (RR10) district, only the largest 25% of vacant lots develop, on the assumption that these are most likely to develop without water & sewer; all developed lots are for single-family homes.
- In Wickiup Junction, only the largest 25% of vacant lots under 2.5 acres are developed; 10% of the new housing is assumed to be developed as duplexes. Parcels larger than 2.5 acres we assumed would be held for investment purposes to eventually subdivide beyond the 20-year planning horizon. Smaller parcels were assumed to be challenging to build on because of access and site constraints.
- In the La Pine Residential District, all vacant lots of record less than 1.5 acres are developed, with 10% developed as duplexes.
- In the La Pine Neighborhood Residential Center and La Pine Neighborhood General Residential zones, all remaining vacant lots less than 1.5 acres are developed as single-family homes.

The above development pattern would leave a housing deficit so the remaining units needed were assumed to be constructed in subdivisions on the larger vacant parcels in the La Pine Residential zone at the minimum lot size allowed (5,000 sf), with 10% of the lots developing as duplexes. We assumed that 20-30% of the land in these parcels would be set aside for public uses and ROW (20% for larger parcels, 30% for smaller parcels where inefficiencies are greater).

Village Community

This scenario envisions less development on lots of record in the northern end of the City, assumes some subdivisions and partitions on mid-size lots in the southern end of the City, and introduces some apartment development.

- In the Rural Residential Zone (RR10), only the largest 10% of vacant lots are developed, on the assumption that these are the easiest to develop septic systems; all are developed as single-family homes.
- In Wickiup Junction, only the largest 10% of vacant lots under 2.5 acres are developed, on the assumption that larger parcels might eventually subdivide (outside the planning horizon); smaller parcels were assumed to be more challenging to build on. 10% of newly developed residential lots are assumed to be as duplexes.
- In the La Pine Residential District, all vacant lots of record under 1-acre are developed, with 10% of those lots developed as duplexes.
- In the La Pine Neighborhood Residential Center and La Pine Neighborhood General Residential zones, all remaining vacant lots under 1.5 acres are developed as single-family homes.
- The southeastern quadrant of Neighborhood #1, zoned La Pine Neighborhood Residential Center, is developed as apartments at a density of 10 units per acre.
- Five parcels, roughly 2.25 acres each, in the La Pine Residential District, are subdivided at the minimum lot size (5,000 sf), with about 30% of the lot area set aside for ROW; 5% are developed as duplexes.
- All vacant lots in the La Pine Residential District between 1.0 and 1.5 acres partition; about half partition to two lots, and the other half partition to three lots. This reflects the challenge of frontage on many of these lots. Most are developed as single-family homes but 10% are developed as duplexes.

Urban Village

- In this scenario, there is no infill development in the northern end of the City. More apartment development is assumed at the northern edge of the commercial district, with somewhat less infill of the southern La Pine Residential District.
- In the La Pine Residential District, all vacant lots of record under 1-acre are developed, with 10% duplexes.
- In the La Pine Neighborhood Residential Center and La Pine Neighborhood General Residential zones, all remaining vacant lots under 1.5-acres are developed as single-family homes.
- The southeastern quadrant of Neighborhood #1, zoned La Pine Neighborhood Residential Center, is developed as apartments at a density of 12 units per acre.
- All vacant lots between 1 and 1.5 acres in the La Pine Residential District partition into 2 lots; 10% are developed as duplexes.
- One parcel at the northern end of the La Pine Commercial zone is developed as apartments at a density of 10 units per acre.

Implications of the land use scenarios

A number of calculations will be prepared for each of these development scenarios, including the number of single-family and multi-family housing units developed and the total acres developed. These development factors will then inform an analysis of service costs and tax revenue projections. The land use implications for each scenario may generally be summarized as follows.

Zone abbreviations used in tables:

RR10 = Rural Residential

LPWCR = La Pine Wickiup Commercial Residential (i.e. Wickiup Junction)

LPR = La Pine Residential

LPNRC = La Pine Neighborhood Residential Center

LPNRG = La Pine Neighborhood Residential General

LPC = La Pine Commercial

Base Case - The implication of the base case development pattern is that future development would be scattered throughout the city at relatively low density. No policies would be put in place to influence development's direction, scale, or density. This scenario results in the greatest amount of land developed (238.46 acres in all). While much of the growth would occur through infill development, the subdivisions are on large lots totaling about 35 acres. The new subdivisions would require building and maintaining new roads and extending utilities. Approximately 1.18 miles of new roads would be needed to serve the new subdivisions, based on the road miles per acre in existing subdivisions in La Pine (0.034 miles of roadway per acre of land).

Development Type	Zone	Acres Used	Parcels Used	Percent multi-family	Number multi-family	Number single-family	Total units new
Lots of record	All zones	203.1	317	5%	30	302	332
Subdivisions	LPR	35.3	78	0%	-	78	78
Total		238.5	395	7.3%	30	380	410

Rural Community - The implication of this scenario is that the city would develop in a more compact manner and at a slightly higher average density than in the Base Case, primarily because of developers taking advantage of the opportunity to create more building lots in subdivisions located in the La Pine Residential zone. Close to half (46%) of the new housing is built in these subdivisions at an average density of 7.3 du/acre. All remaining homes are developed on existing lots of record, but most of that development would occur be in the southern part of town where there is a higher inventory of buildable lots. This scenario results in less land developed overall than the base case (a total of 138.1 acres), with just over 25 acres in new subdivisions. The new subdivisions would require approximately 0.87 miles of new roads.

Development Type	Zone	Acres Used	Parcels Used	Percent multi-family	New multi-family	New single-family	Total new units
Lots of record	RR10	34.0	22	0%	-	22	22
	LPWCR	19.4	14	10%	2	13	15
	LPR	52.8	138	10%	26	125	151
	LPNRC, LPNRG	5.9	33	0%	-	33	33
Subdivision	LPR	25.9	172	10%	34	155	189
Total		138.1	379	15.1%	62	348	410

Village Community - The implication of this development scenario is that the city would develop more compactly in the south and in the central part of the city. Less residential development would occur in the north and in Wickiup Junction than under the earlier scenarios. The total amount of land developed is reduced in this scenario from the previous two, with only 109 acres developed. The amount of land in subdivisions (including the land developed as apartments, which would also require new roads and utilities) is also reduced slightly to 21 acres. The amount of new roadways is also reduced, to 0.70 miles, assuming that the subdivisions and apartments both require roughly as many miles of roadway per acre as existing La Pine subdivisions.

Development Type	Zone	Acres Used	Parcels Used	Percent multi-family	New multi-family	New single-family	Total New Units
Lots of record	RR10	17.7	8	0%	-	8	8
	LPWCR	9.2	5	0%	-	5	5
	LPR	21.1	109	10%	20	99	119
	LPNRC, LPNRG	5.9	33	0%	-	33	33
Partition	LPR	34.32	72	10%	14	65	79
Apartments	LPNRC	9.4	1	100%	94	-	94
Subdivision	LPR	11.55	69	5%	6	66	72
Total		109.2	297	32.7%	134	276	410

Urban Village - The implication of this development scenario is that the city would develop even compactly and with more housing choices especially in the south and central neighborhoods. Less residential development would occur in the north and in Wickiup Junction than under the earlier scenarios and less land overall would be developed. This scenario has the least land developed, and the least land requiring new utilities. A total of 79 acres would be developed, with just 18 acres

requiring services (in land developed for apartments). This newly developed area would require roughly 0.60 miles of new roads.

Development Type	Zone	Acres Used	Parcels Used	Percent multi-family	New multi-family	New single-family	Total New Units
Lots of record	LPR	21.1	109	10%	20	99	119
	LPNRC, LPNRG	5.9	33	0%	-	33	33
Partition	LPR	34.32	58	10%	10	53	63
Apartments	LPNRC	9.4	1	100%	113	-	113
	LPC	8.57	1	100%	82	-	82
Total		79.4	202	54.9%	225	185	410

Assessed Value Growth Assumptions

Average assessed values for newly constructed single-family and multi-family housing units were derived from Deschutes County Assessor records. For single-family houses (including manufactured structures), the assessed value assumption is based on the average assessed value of homes built between 2004 and 2006. The assessed percentage is approximately ___% of market value county-wide.

For multi-family homes, the assessed value assumption is based on a range of values for multi-family structures in Redmond, including an average for all multi-family units in Redmond; per unit assessed values for several specific apartment developments in Redmond built in the 1990s (Chaparral Apts., Obsidian Apts., Redmond Triangle Housing, and Reindeer Meadows); and a calculated assessed value for a newly permitted apartment development (Glacier Vista Apts.) based on its building permit valuation. The value used for these developments falls within the range of assessed values per unit derived from the various sources considered. The assessed percentage is approximately ___% of market value county-wide.

Housing Type	Assessed Value per Unit
Single-family	\$90,738
Multi-family	\$29,500

For newly constructed commercial and industrial developments, the variance county-wide is significant. We elected to use an average cost per square foot for new construction and applied to that cost the current ratio allowed between market value and assessed value. Demand was calculated on the basis of sq ft per 1000 residents, with the current ratio held constant for industrial uses and reduced to half the current ratio. The reason for this reduction is that existing businesses enjoy a competitive advantage in the market place and new competitors are unlikely to enter the market until the local customer base increases significantly to ensure a viable trade base for those businesses.

Cost of Service Assumptions

For all land use scenarios, we used the same cost of service assumptions. Variances in the cost to deliver services are based on differences in geographic coverage for various services.

Road Maintenance

Costs were based on information provided by Deschutes County Public Works Department for its southern maintenance district.

- Gravel Roads - \$6,000 per mile per year (annual cost for spreading and grading)
- Paved - \$13,000 per mile per year (amortized over 50 year service life assuming preventive maintenance program).

Maintenance Activity	Approximate Frequency	Cost per Mile
Paved Roads		
Crack seal	Every 6-8 years	\$6,000
Chip seal	Every 6-8 years	\$27,000
Overlays (2")	Every 20 years	\$150,000
Patching, sweeping, winter maintenance	Annualized cost	\$2,000 per year
<i>Total annualized cost per mile</i>		<i>\$13,000 per year</i>
Gravel Roads		
Grading	Annualized cost	\$2,000 per year
Dust abatement	Annualized cost	\$4,000 per year
<i>Total annualized cost per mile</i>		<i>\$6,000 per year</i>

Service geography and miles of roads to maintain varies for each alternative based on land use assumptions.

Fire District

The cost to staff local station is forecast to rise per historic trends while revenue to the district will accrue based on assessed new construction value plus the allowed annual % increase.

Water Service/Sewer Service

Costs evaluated on a relative scale for each land use alternative based on the geographic service foot print. The districts operate their service functions as enterprise funds so cost recover is assured through rate setting authority.

Parks

None anticipated.

Planning Services, Building Inspection, Administrative Services

Costs estimated based on current budget and increased over time based on changes in cost of services for Deschutes County service departments.