

CITY OF CARNATION

Residential

Net New Units: 1993 – 2000

During this eight-year period, 158 net new units were permitted in City of Carnation and in the unincorporated Urban Growth Area (UGA) to the north of the city. From 1996 – 2000, 91 net new units were permitted. About 81 of these units were issued by the City of Carnation and 11 additional units were issued by King County in the UGA. From 1993-1995, 62 permits were issued in the area that now comprises the City of Carnation and 5 units were issued in the UGA.

1996 - 2000				1993-1995	TOTAL
Gross Permitted Units	Any Other New Units (ADUs, Conversions, etc.)	Demolitions	Net New Units '96-2000	Net New Units 1993 - 1995	Net New Units: 1993 - 2000
81	11	(1)	91	67	158

Residential Development Activity

As measured by permit activity, the average density achieved in single-family zones in the current city was 2.1 dwelling units per acre. Plat activity shows an achieved density of 2.2 du/acre in single family-zones. There was no development in multi-family or mixed-use zones from 1996 to 2000.

1996 - 2000 Residential Permit Activity						1996 - 2000 Residential Plat Activity					
Single Family Zones			MultiFamily and Mixed Use Zones			Single Family Zones			MultiFamily and Mixed Use Zones		
Net Acres Permitted	Total Number of Units	Avg. Permit Density	Net Acres Permitted	Total Number of Units	Avg. Permit Density	Net Acres Platted	Total Number of Lots	Avg. Plat Density	Net Acres Platted	Total Number of Lots	Avg. Plat Density
		(D.U. / Acre)			(D.U. / Acre)			(Lots / Acre)			(Lots / Acre)
37.72	81	2.1				37.62	81	2.2			

The table below represents the densities Carnation used to calculate capacity within the current city and in the UGA. Densities for the UGA are based on planned zoning changes to be made after annexation and not on current King County zones.

Assumed Future Residential Densities in The City of Carnation			
Zoning	Achieved DUs/Acre	Assumed DUs/Acre	Reasons/Documentation
SR-12.5	2.16	2.16	
UR-7.5	2.05	3.50	Achieved density based on development without the presence of sewerage. Health regulations for minimum lot area for homes with septic systems have depressed densities. Assumed future density reflects a realistic achievable density given the availability of sewer service.
MFR		15.00	No activity. Assumed future density based on planned density, with sewer service.
MU		15.00	No activity. Assumed future density based on planned density, with sewer service.
Assumed Future Residential Densities in Carnation's UGA			
Zoning	Achieved DUs/Acre	Assumed DUs/Acre	Reasons/Documentation
SR 12.5		2.00	The assumed density of 2 du/acre was based on current development trends and applied to redevelopable land. The capacity on vacant land in this zone was estimated based on current developments trends of 1 unit per parcel.
MU		15.00	Assumed future density based on planned density, with sewer service.

Residential Land Supply

After deducting constraints, Carnation has approximately 61 net acres of vacant and redevelopable land in its current city limits. With an adjustment for market variables, about 46 acres of this land is potentially available for development during the planning period. There are also approximately 46 acres of land potentially developable in the UGA. Altogether there is a total of about 92 acres potentially available for development within the city and its planned annexation area.

	Residential Land Supply					Market Factor	Adjusted Net Acres
	Gross Acres	Deductions			Net Acres		
		Critical Areas	ROWs / Other	Public Purposes			
Acres	Acres	%	%	%	Acres		
SF Vacant	39.54	5.95	5%	5%	30.23	25%	22.67
SF Redevelopable	27.19	-	5%	5%	24.47	25%	18.35
MF Vacant	0.50	-	5%	5%	0.45	25%	0.34
MF Redevelopable	5.36	-	5%	5%	4.82	25%	3.62
MU Vacant	0.56	All deductions and market factors applied before dividing into commercial / residential acres			0.56		0.56
MU Redevelopable	0.27				0.27		0.27
Sub Total: Current Land Supply	73.42	5.95			60.81		45.81
UGA Vacant	28.00				28.00		28.00
UGA Redevelopable	26.00		0.20		20.80	25%	15.60
UGA Mixed Use	4.00		0.20		3.20	25%	2.40
Total Residential	131.42	5.95			112.81		91.81

The assumed higher discounts in the UGA reflect higher needs for future ROW and public purposes, as well as a greater potential for additional critical areas on large parcels. The capacity for vacant land in the UGA was based on current development trends of 1 unit per parcel therefore no deductions were taken.

Residential Capacity

Carnation has capacity for 127 new housing units within the current boundaries of the city. There is an additional capacity of 80 units in the UGA. The total capacity for Carnation and its UGA is 209 units. Capacity calculations presumed the future availability of sewer service. A lower development capacity would result if sewers were not in place within the planning period.

Zone	Capacity in Single Family Zones				Total Capacity in SF Zones	Capacity in Multifamily Zones	Total Capacity in MF Zones	Total in Mixed Use Zones	Capacity within the City	UGA Capacity			Total Capacity
	0-2 du / acre	2-4 du / acre	4-6 du / acre	6-8 du / acre						All Zones with Residential Capacity	SR 12.5 Vacant	RS 12.5 Redev	
Net Acres of Land		21.63	19.39		41.02	3.96	3.96	0.83	45.81	28.00	15.60	2.40	
Density		2.16	3.50			15.00				0.46	2.00	15.00	
Capacity in Units		47	68			59	59	12	72	13	31	36	
Minus Existing Units on Redevelopable Parcels		(8)	(5)			(43)	(43)	(3)	(46)	-	-	-	
Net Capacity		39	63		102	16	16	9	127	13	31	36	209

Residential Capacity Analysis

Carnation has a total residential capacity of 209 units based on the availability of sewer service. Further development in the UR-7.5 zone and higher densities of 15 du/acre in the MFR and MU zones would not be achievable without the availability of sewers. Based on the data in this analysis, Carnation's remaining target to 2012 is 246 units. As a result, there is a deficit capacity of more than 37 units depending on sewer availability.

Residential Capacity in Relation to Target					
Net New Units: 1993 - 2000	20 Year Housing Target	Percent Achieved	Remaining Target	Current Capacity	Surplus or Deficit in Relation to Target
158	404	39%	246	209	(37)

Commercial and Industrial

Net New Jobs: 1995 – 2000

Carnation has gained a net of 177 new jobs within the boundaries of the current city during the most recent five years, 1995 to 2000, of the 1992-2012 planning period. Job growth in the Urban Growth Area (UGA) was minimal and not included in this analysis.

1995 Employment	2000 Employment	Net New Jobs
414	591	177

Commercial and Industrial Development Activity

Carnation achieved an average floor area ratio (F.A.R.) of approximately .13 over all its commercial zones and a FAR of .32 over all its industrial zones.

Commercial and Industrial Development: 1996 - 2000						
	Gross Site Area	Constraints	Net Site Area	Net Site Area	Floor Area	Achieved F.A.R.
	Acres	Acres	Acres	Sq. Ft.	Sq. Ft.	Floor Area / Net Site Area in Sq. Ft.
Commercial	0.18	0.04	0.15	6,430	850	0.13
Industrial	1.24	0.16	1.09	47,321	15,000	0.32
Total C & I Development	1.43	0.19	1.23	53,751	15,850	0.29

Details on achieved F.A.R. by zone, and assumptions for future F.A.R. by zone are included in the table below. The F.A.R densities in the UGA are based on Carnation's planned zoning for the area after annexation.

Assumed Future Non-Residential Densities			
Zoning	Achieved FAR	Assumed FAR	Reasons/Documentation
CBD	0.13	0.30	Achieved density based on small sample of permits. Assumed future density based on FARs achieved in similar zones in comparable rural cities.
E/O		0.40	Achieved density based on small sample of permits. Assumed future density based on FARs achieved in similar zones in comparable rural cities.
LI/M	0.32	0.32	
MU		0.40	Achieved density based on small sample of permits. Assumed future density based on FARs achieved in similar zones in comparable rural cities.
Assumed Future Non-Residential Densities in Carnation's UGA			
Zoning	Achieved DUs/Acre	Assumed DUs/Acre	Reasons/Documentation
MU		0.30	Assumed less dense development than in the current city.
E/O		0.30	

Commercial and Industrial Land Supply

After deducting constraints, Carnation has about 8 net acres of vacant and redevelopable commercial and mixed-use land in its current city limits. After adjusting for market factors, about 7 acres are potentially available for development during the planning period. There is also approximately 12 acres of land available in the UGA. Altogether there is a total of about 19 acres potentially available for development within the city and its planned UGA.

	Gross Acres	Deductions			Net Acres	Market Factor	Adjusted Net Acres
		Critical Areas	ROWs	Public Purposes			
Commercial Vacant	17.53	12.81	5%	5%	4.25	25%	3.18
Commercial Redevelopable	1.05	0.00	5%	5%	0.95	25%	0.71
Industrial Vacant							
Industrial Redevelopable							
Mixed Use Vacant	2.23	All deductions and market factors applied before dividing into commercial / residential acres			2.23		2.23
Mixed Use Redevelopable	1.07				1.07		1.07
Sub total: Current Land Supply	21.88	12.81			8.49		7.19
UGA Vacant	23.00	40%			13.80	50%	6.90
UGA Redevelopable							0.00
UGA Mixed Use	16.80	40%			10.08	50%	5.04
Total C & I Land	61.68	13.61			32.37		19.13

Commercial and Industrial Capacity

Carnation has capacity for a total of 294 new jobs within the current boundaries of the city. There is additional capacity for 466 new jobs in the UGA. The total job capacity for Carnation and its annexation area is 759 jobs. Capacity calculations were based on the assumption that sewer service will be available during the planning period.

Zone	Empl. Capacity in Commercial Zones		Empl. Capacity in Mixed Use Zones	Empl. Capacity in Industrial Zones	Total Job Capacity in Commercial, Industrial and Mixed Use Zones	UGA Capacity		Total Capacity
	E / O	CBD	MU	LI / M		E / O	MU Commercial	
Net Land in Sq. Ft	94,156	30,873	143,762	44,565		300,564	219,542	
Achieved or Assumed F.A.R. (Avg.)	0.40	0.30	0.40	0.32		0.30	0.30	
Dev. Capacity in Sq. Ft	37,662	9,262	57,505	14,261		90,169	65,863	
Net Capacity (Minus Existing Floor Area on Redev. Parcels)	37,662	4,279	57,505	14,261		90,169	65,863	
Floor Area Per Employee (Avg.)	300	400	400	1,000		300	400	
Job Capacity	126	11	144	14	294	301	165	759

Employment Capacity in Relation to Target

Carnation has a capacity for 759 new jobs based on the availability of sewer service. Development capacity would be reduced if sewers were unavailable over the planning period. Carnation currently does not have a job target.

Net New Jobs	20 yr. Job Target	Percent of Target Achieved in 5 Yrs. (25% of Target Period)	Remaining Job Target	Job Capacity	Surplus or Deficit in Relation to Target
177	-	-	-	759	759