

# Linkage Zoning: North American Resort Case Studies

**Tricia Austin,  
University of Auckland  
September 2007**

In developing a linkage zoning policy, there is a need to ensure

1. that a 'rational nexus' or relationship is demonstrated between the impacts caused by the development and the affordable housing mitigation required and
- 2, that there is 'rough proportionality' between the extent of the generated impacts on housing affordability and the mitigation required.

Linkage policies cannot be used to address housing affordability 'catch-up' issues. Linkage policies can only be used for 'keep-up'; that is meeting the need for affordable housing generated by the development.

The following examples from North American resort communities are helpful in considering different approaches for demonstrating that a need for affordable housing is created by new development and the extent of mitigation required. Each resort is unique. Each housing market is different and the affordable housing policies that have been implemented over time have responded to the local political and economic context.

The Linkage Policy for the Town of Vail is described in the most detail below, as it illustrates the policy decisions that have to be made when developing and applying linkage mitigation policies. Policy decisions are highlighted in italics. The subsequent case studies are of Eagle County (surrounds Vail), City of Aspen and Pitkin County, Town of Breckenridge and Summit County, City of Jackson and Teton County, Town of Telluride and San Miguel County, the Resort Municipality of Whistler and Nantucket Island. The Case Studies focus on the linkage housing policy. It is important to note that all of these resort communities have adopted a range of policies to finance affordable housing, in addition to applying a linkage fee policy. These policies include inclusionary zoning; local sales taxes and / or real estate transfer taxes dedicated for affordable housing; accommodation taxes based on room numbers in hotels; and increases in property taxes (rates).

## **Town of Vale, Colorado, USA**

Population 4,500, (US Census, 2000)

Median h/h income: US\$56,680

% of renters paying > 30% of income for housing 31.6%

38% of Vail employees live in the Town of Vail.

The development of the Town of Vail's employee housing mitigation programme started with "The Town of Vail Nexus Proportionality Analysis" (RRC Associates, 2007). In this report, the necessary 'rational nexus' and 'rough proportionality' are determined as follows.

### **The Level of Service**

There are two issues here:

- The income range targeted by the affordable housing programme
- The current % of households living in the Vail that earn within the income range targeted. 30.5% of the Town of Vail's households earned less than 80% of the household Area Median Income (AMI). 48% of the Town of Vail's households earned less than 100% of the household AMI, in 2006.

Employee housing mitigation requirements (based on a 'keep up' approach) should reflect current levels of affordable housing plus any current 'catch-up' policies being implemented by the Town. *The*

*Town of Vail had to decide what income range to target (ie <80% or < 100% AMI), and the above figures could then be used to support a policy of mitigation set at 30.5% or 48% respectively.*

### **Employment Generation Rates**

#### **Commercial Linkage:**

Established full time equivalent employment generation rates (from survey data) for the following categories:

Eating and drinking establishments	No./1000sq.ft.
Accommodation Unit / Limited service lodge unit:	No./unit
Retail store/ personal service/repair shop	No./1000sq.ft.
Business and professional office	No./1000sq.ft.
Real Estate Office	No./1000sq.ft.

#### **Residential Linkage:**

This includes direct employment generated by the operation and maintenance of the dwelling.

Established residential employment generation rates by size of residential unit (ie per 1,000 sq.ft.)

*Note: the Town of Vail decided not to include a differential employment generation rate for Second Homes despite surveys identifying higher employment generation; and excluded construction employment generated by the development.*

#### **Converting from Workers to Households**

The number of households generated by a project was taken to be the number of new employees divided by 1.5 employees per household, based on Census data.

#### **Identifying Programme Methods and Household Targets**

*The households to target have to be identified.*

Developers must not be double-charged by housing requirements. For example, if linkage requirements and inclusionary zoning are both in place, they should target different household income groups.

*Mitigation rates can be different for residential and commercial development, provided there is a legitimate public purpose.*

#### **Mitigation Formula**

For each proposed development: the number of new employees expected to be generated is determined (size of development x generation rate); the number of employees is converted to households generated by the proposed development; this number of households is then multiplied by the agreed % mitigation rate to determine the number of affordable units required.

**Fees in lieu are determined** by calculating the affordability gap: ie the gap between affordable and market costs for the income levels of the targeted households, for rental and purchase.

**The Town of Vale considered the following in setting its mitigation policy:** The Town Council has a goal to provide housing for at least 30% of the new employees generated from new development in the Town. Commercial development generates sales tax that is currently used by the Town to assist in the provision of affordable housing, ie commercial development already mitigates some impacts through sales tax collection. It was agreed that the commercial rate should be set at 20%.

If the residential linkage was set at 30% it would not generate housing for as many employees as residential inclusionary zoning set at 15% of all new net residential square feet. Inclusionary zoning is allowed under Colorado state law, and planners were familiar with the approach.

With an inclusionary zoning requirement of 10% of all new net residential square foot in higher density zone districts, the Town's goal could be met: ie "to provide housing for at least 30% of the new employees generated from residential and commercial development in the Town".

*A policy of residential linkage zoning is currently under consideration for the lower density residential zones.*

## **The Town of Vail Policies for Mitigating Employee Housing Impacts**

Ordinance Number 7 and 8 (2007) amend the existing zoning regulations for the Town of Vail for Commercial Linkage and add a new provision for Inclusionary Zoning.

The purpose of the amended **Commercial Linkage Zoning (Ordinance No. 7)** is to ensure that commercial development and redevelopment provide for a reasonable amount of employee housing to mitigate the impact on employee housing caused by the (re)development. The 2007 Nexus Study determines employee generation rates, per sq. foot of different types of commercial use.

“Each commercial development or redevelopment shall mitigate its impact on employee housing by providing employee housing units for 20% of the employees generated ...”  
(Town of Vail, 2007)

Minimum size and development standards requirements for the employee housing are established in the ordinances, as are occupancy and deed restrictions. The mitigation may be accomplished by providing on-site units or land, off-site units or land, or fees in lieu. There is no priority given between these mitigation provisions.

**Ordinance No. 8 (Inclusionary Zoning, 2007)** sets out some key features of the housing market:

- Local residents own only approximately 32% of all homes in the Town of Vail, and only 22% of those homes that were built in 2005
- 47% of all households in the Town of Vail earned less than 100% of the area median household income in 2006
- There are virtually no homes in the Town’s housing market that are potentially affordable to households earning less than 140% of the area median household income
- There is a scarce supply of developable land
- The Town Council’s goal is to provide housing for at least 30% of the new employees generated from residential and commercial development in the Town through the conjunctive efforts of this ordinance and the Town’s commercial linkage ordinance.

The purpose of introducing the new Inclusionary Zoning ordinance is to ensure that new residential development and redevelopment provide for a reasonable amount of employee housing to mitigate the housing affordability impact and applies to all residential development of at least one net new dwelling unit, within designated higher density zones. It is a 10% requirement as follows:

“Every residential development and redevelopment shall be required to mitigate its direct and secondary impacts on the Town by providing employee housing units at a mitigation rate of 10% of the total new GRFA”  
(Town of Vail, 2007)

The fees-in-lieu for each employee to be housed (Commercial Linkage) and each sq foot of employee housing to be provided (Inclusionary Zoning) include the net cost of property, planning, design, site development, legal, construction and construction management and an administration fee and are to be established annually by the Town Council.

## **Eagle County, Colorado, USA**

Eagle County surrounds the Town of Vail.

Population 41,659 (US Census, 2000)

Median h/h income: US\$62,682

% of renters paying > 30% of income for housing 34.6%

Eagle County residents own 53% of residences in the County.

RRC Associates – using a similar methodology and analysis to the one undertaken for the Town of Vail, undertook a Nexus Proportionality Analysis in 2005 for Eagle County.

## **The Level of Service**

The report found that housing linkage programmes that target employee households earning less than 80% AMI could support a 30% mitigation rate; one targeting households earning less than 100% could

support a 45% mitigation rate, and for one targeting households earning less than 120% AMI could support a 58% mitigation rate, based on current levels of service.

### **Employment Generation Rates**

#### **Commercial Linkage:**

Established Full Time Equivalent employment generation rates (from survey data) for the following categories:

Bar/restaurant	No./1000sq.ft.
Lodging/hotel	No./unit
Commercial/Retail	No./1000sq.ft.
Property management	No./1000sq.ft.
Office	No./1000sq.ft.

#### **Residential Linkage**

This includes direct employment generated as a result of servicing the dwelling. The study established residential employment generation rates by size of residential unit (ie per 500 sqft).

*As for the Town of Vail, a decision was made to not differentiate Second Homes and to exclude construction employment generated by the development.*

#### **Converting from Workers to Households**

The number of households generated by a project was taken to be the number of new employees divided by 1.92 employees per household (based on local survey data).

#### **Identifying Programme Methods and Household Targets**

In the **Local Resident Housing Guidelines for Eagle County 2005**, linkage requirements are targeted for 60-80% AMI households and inclusionary zoning requirements are targeted for 80-100% of AMI households.

#### **Section 3 – 110 Inclusionary Housing**

“All new residential developments of 4 or more units within ... Eagle County ... should include up to 20% of the total units developed as Local Resident Housing for qualified moderate (80-100% AMI) low (60-80% AMI) and very low (30-60% of AMI) income households on site. When required to develop one Local Resident Housing Unit, the developer will be required to build a two-bedroom unit. When required to develop more than one unit, ... the average purchase price does not exceed that required for a two-bedroom unit at 80% of AMI.”  
(Eagle County, 2005)

#### **Section 3 – 120 Employee / Housing Linkage**

All new development, residential, commercial and other nonresidential will be subject to employee/housing linkage and will have to provide up to 20% of the total housing need generated by the employees (using the employment generation rates established by the Nexus study) for qualified low and very low income households (30 – 80% of AMI) on site.

“When required to develop more than one unit, ... the average purchase price does not exceed that required for a two-bedroom unit at 60% of AMI.”  
(Eagle County, 2005)

#### **Mitigation rates vary with provision.**

The guidelines clearly establish a preference for on-site provision, at a rate of 20%. Where on site is not possible, an off-site mitigation rate of 25% applies, or a payment in lieu fee at a 30% mitigation rate is to be paid. As an alternative, the developer may provide subdivided and serviced sites to accommodate a minimum of 150% of the Local Resident Housing Units required.

Deed restrictions and appreciation caps must be put in place and purchase prices established at no more than 30% of gross household income for the target household groups.

If a developer provides a combination of compliance measures that go beyond the minimum guidelines, Eagle County has the discretion to offer incentives such as a density bonus, site design flexibility, priority permitting, and public funding assistance.

## City of Aspen, Colorado, USA

Population 5,807 (US Census, 2000)

Median H/h income: US US\$59,375

% of renters paying > 30% of income for housing 43%

75% of Aspen's work-force live outside the City limits in Pitkin County.

## Pitkin County, Colorado, USA

Population 14,872 (US Census, 2000)

Median h/h income: US\$53,750

% of renters paying > 30% of income for housing 36.3%

## City of Aspen

Aspen has a long established affordable housing programme that makes use of incentive zoning, employee housing mitigation and public investment. The latter is funded primarily by a local 1% Real Estate Transfer Tax (RETT) and a local dedicated sales tax alongside additional funding sources. Inclusionary zoning under the Aspen Area Community Plan requires at least 60% of the bedrooms in a residential subdivision to be in deed-restricted affordable housing units. An Affordable Housing Zone (introduced in 1994) allows the developer to exceed the Growth Management Quota System but must provide a mix of at least 70% deed-restricted units. And where existing residential units are demolished to make way for new development, 50% must be replaced with affordable deed-restricted units.

In the City of Aspen, there is a mandatory linkage fee for all new commercial development over 1,000 sq ft, requiring affordable housing for 20% of the full time employees generated. With the Growth Management Quota System in operation it places high levels of mitigation in general: 60% of the employees generated by additional commercial or lodge development have to be mitigated through the provision of affordable housing. There is a sliding scale that operates for tourism lodge development: with the 60% applying when greater than 8 employees are generated but reduced to 30% for less than 8 employees.

"The Employee Housing Guidelines for Pitkin County and the City of Aspen" (2007) set out the requirements for the mandatory linkage zoning for both Aspen and Pitkin County. Seven income levels and types (number of members) of households are identified for targeting. On-site housing is preferred to off-site housing, which is preferred to cash or land in lieu. In Aspen the payment in lieu fee is based on an assumption that for every 3,000 sq. ft. of new single-family or duplex floor area, there will be a housing need that must be mitigated of one moderate-income employee. Where land in lieu is contributed, it must be supplied as vacant lots, fully developed with infrastructure and ready for construction.

## Pitkin County

In Pitkin County an employee housing impact fee applies to both residential and commercial development. A critical component in developing the mitigation fee is the fee subsidy. This is calculated from the amount by which the buying power of a typical household falls short of the amount needed to purchase market-rate housing and then adjusted to a per employee subsidy based on the average number of employees per household. In 2006 the per employee fee subsidy was calculated as US\$34,173.

In Pitkin County, the **Residential Housing Impact Fee** does not apply to a dwelling of less than 5434 sq ft interior floor area. The formula takes into account the size of the development, construction employment, post-construction employment, and whether it is for a (covenanted) locally occupied dwelling or a second home (the latter generating significantly more employment).

The **Commercial Housing Impact Fee** in Pitkin County is based on the number of employees generated by the type of development according to the following categories:

Tourist accommodation	No./room
Commercial	No./sq.ft.

Office - general, real estate, non-profit	No./sq.ft.
Retail	No./sq.ft.
Service (repair, personal, business)	No./sq.ft.
Restaurants and bars	No./sq.ft.
Government	No./sq.ft.

The required impact fee takes into account the expected number of employees generated by that size and type of development and the employee fee subsidy. Commercial development must contribute for 100% of the employees generated.

### **Town of Breckenridge, Colorado**

Population 2,366 (US Census, 2000)  
 Median h/h income: US\$43,938  
 % of renters paying > 30% of income for housing 45.6%

### **Summit County, Colorado**

Population 23,548 (US Census, 2000)  
 Median h/h income: US\$56,587  
 % of renters paying > 30% of income for housing 33.63%

The mountain resorts in the **Summit County** are required to provide housing for their employees in their Planned Unit Development approvals: for 40% of their full-time workforce and 60% of their seasonal workforce: 75% of the housing must be provided within the resort.

The **Town of Breckenridge** has a policy of encouraging the provision of employee housing units in connection with commercial, industrial and multi-unit development. The encouragement is based on a pointing system – with points being awarded (or taken away) for the provision of employee housing, and for a range of policy goals, such as for historic preservation or restoration, or for a contribution to non-auto transit facilities etc. A table is used to allocate points to the development proposal on the basis of total square footage (irrespective of type of development). A contribution of 5% of the site area as affordable housing is expected (ie worth 0 points). A contribution less than 5% is assessed with negative points, a contribution greater than 5% acquires positive points.

### **City of Jackson, Wyoming**

Population 8,800 (US Census, 2000)  
 Median h/h income: US\$47,757  
 % of renters paying > 30% of income for housing 31.2%

### **Teton County, Wyoming**

Population 18,251 (US Census, 2000)  
 Median h/h income: US\$54,614  
 % of renters paying > 30% of income for housing 26.8%

60% of the houses in the community are second homes. The demand for second homes has resulted in the doubling of median house prices in the period 2000 to 2004 and the displacement of many local long-term residents. The City and County have worked together to introduce a range of policies to increase the supply of affordable housing – including a Special Purposes Tax; a density bonus scheme when more than 66% of the units in a Planned Unit Development are affordable; a 15% mandatory inclusionary zoning for affordable housing for all new residential development; a transfer of development rights if a proportion of the new development is designated affordable; and a land lease programme (or community land trust).

In 2006, the Jackson / Teton County Comprehensive Plan established a goal of housing 70% of the workforce in the community. The plan was amended to include a mandatory (linkage) employee housing mitigation for all Commercial development, planned resorts and non-residential development.

A Table gives the Employees Required to be Housed per 1,000 sq.ft. of development, under the following categories

Offices  
Commercial / Retail  
Heavy retail / service  
Restaurant / bar  
Commercial lodging:      Ranch  
                                         Campground  
                                         Hotel / motel  
  
Nursery  
Aeronautical  
Industry

The numbers of employees required to be housed are determined by calculating the number of peak season employees in need of housing, accounting for those already in housing and their income levels. A 69% mitigation rate is set under this formula.

### **Town of Telluride, Colorado**

Population 2,058 (US Census, 2000)  
Median h/h income \$51,938  
% of renters paying > 30% of income for housing 39.7%

### **San Miguel County, Colorado**

Population 6,594 (US Census, 2000)  
Median h/h income \$48,514  
% of renters paying > 30% of income for housing 40%

Resort development began in 1970s and was accompanied by rapidly increasing house prices. Small-acreage 'ranchette' development began in the 1990s. In San Miguel County more than 60% of the dwellings are second homes and vacation dwellings.

For all new commercial and tourism developments in the Town and the County mandatory linkage zoning applies. Employment generation factors have been established in a similar manner to the other resort communities, for:

Commercial Development	No./sq.ft.
Hotels and Accommodation	No./lodging unit
Residential Development	No./dwelling unit

New developments are required to provide 350 sq. feet of affordable housing for 40% of new employees generated by the development. The contribution can be affordable employee housing on-site, off-site or cash in lieu (which applies when a developer owes less than 350 sq.ft.) The policy does not apply to single-family houses or duplexes, but it does apply to multi-family housing, triplexes and large scale residential developments.

### **Resort Municipality of Whistler, BC, Canada**

Population 8,896 (Statistics Canada 2002)  
Median Household Income: C\$ 58,906  
Median rent: \$1196

In 2002, in the winter season, 10,600 workers (74%) lived in Whistler. 48% of the workforce spent more than 30% of their income on housing, 22% sent more than 40%.

### **The Employee Housing Service Charge Bylaw No 1186, 1996**

This is a modified version of a bylaw first enacted in 1975. It requires all new commercial, industrial or tourism businesses to mitigate their impact on the housing market, by either providing affordable housing for a proportion of their employees (covenant restricted) on site or in alternative location, or paying the employee-housing fee to the Municipality. Employee restricted housing is exempt from the Town's Growth Management Strategy, with an exceptions policy enabling developers to build employee housing in areas where development is otherwise not permitted

The Municipality puts the funds in lieu in a Housing Fund, that is used by the Municipality and the Whistler Housing Authority to construct employee housing to mitigate the housing impacts of the new development. The employee-housing fee is a charge of C\$5,578.00 per employee generated.

The bylaw assumes the following Employment Generation Rates:

Commercial	1 employee per 50 sq m of GFA
Industrial	1 employee per 250 sq m of GFA
Residential development which is subject to a rental pool covenant (ie tourist accommodation)	1 employee per 5 guest rooms.

Whistler 2020 commits to housing 75% of Whistler's employees within the resort community, with 1 in 3 residents living in resident-restricted dwellings, whilst not exceeding a maximum of 1,570 new dwelling units. Planning incentive housing initiatives, public-private partnerships and the Olympic legacies are being implemented alongside the Employee Housing Service charge.

### **Nantucket, Massachusetts**

Population 9,520 (U.S. Census, 2000)

45.6% of residents are low to middle-income.

% of renters paying > 35% of incomes for housing 35.2%

Nantucket is a 50 sq mile island south of Cape Cod. Median house prices almost doubled in the period from 1997 to 2001, resulting in an exodus of working families and long-term residents. In 2003, the income needed to purchase a median priced dwelling sold that year would require an income of at least US\$250,000. A 2001 survey showed that over half of all islanders left their homes during the summer to make way for seasonal rentals. During the summer months, the 'population' on the island increases by 400-500% compared with the winter, with the inrush of droves of affluent vacationers. In the summer ~300 workers commute to the island by ferry every day.

The Nantucket Housing Authority has three programmes: to provide affordable housing for long-term residents; to develop housing for seasonal employees; and to provide housing for senior citizens. Policies include the establishment of a Nantucket Housing Needs Covenant; dedicated property taxes; 10% inclusionary zoning; a density bonus scheme in a higher density residential zone with a portion of the units affordable; the donation of houses slated for demolition to the Housing Authority; the development of accessory dwellings (with covenants); and both a commercial and a residential linkage policy.

For the commercial linkage policy adopted in 1995, Nantucket has set the following level of mitigation: one affordable dwelling unit is required for up to each 1,000 sq. ft. greater than 4,000 sq. ft. of gross commercial floor area. There is a fee in lieu payment based on the average sale price of a moderate level family housing in the prior year; in 2006 this was US\$800,000.

The residential linkage fee is targeted to second home construction. The fee is a per sq. ft. charge to be paid on all new residential dwelling construction greater than 2,500 sq.ft.

### **In Summary**

North American resort communities make extensive use of Linkage Zoning, whether referred to as linkage programmes and fees, and /or as employee-housing mitigation policies. For the case studies

considered, the arguments used to demonstrate that a need for affordable housing is created by the proposed new development (the ‘rational nexus’) follow similar approaches to the one that has been developed in the proposed Plan Change for Queenstown Lakes District. The methods used to determine the extent of mitigation required (the ‘rough proportionality’) are more varied depending on the particular characteristics of the resort, the housing market and the use of other affordable housing policies, such as inclusionary zoning.

The **Town of Vail** has a goal of providing housing for at least 30% of new employees generated from development. Since commercial development already mitigates some impacts through a local sales tax, the commercial mitigation rate is set at 20%. There is a 10% inclusionary zoning requirement for residential development. **Eagle County** (which surrounds the **Town of Vail**) set a 20% mitigation rate for all new residential, commercial and other nonresidential development for on-site provision; with a 25% rate for off-site provision and a 30% mitigation rate for a payment of fees in lieu.

The **City of Aspen** has a mandatory linkage fee for all new commercial development over 1,000 sq ft, requiring affordable housing for 20% of the full time employees generated. The mitigation rate is on a sliding scale for tourism lodge developments, ranging from 30% to 60%. **Pitkin County** has adopted mandatory commercial and residential linkage zoning. Unlike Vail, **Pitkin County** includes construction employment in the calculation of employment generated by the development, and assesses employment generation for second (vacation) homes differentially (and at a much higher rate) than for locally occupied dwellings.

The mountain resorts in **Summit County** are required to provide housing for their employees: 40% for their full-time workforce, 60% for their seasonal workforce, with 75% of the housing provided within the resort. In the **Town of Breckenridge** 5% of the site area (of residential and commercial development) is expected to be for affordable housing.

The **City of Jackson** and **Teton County**, Wyoming, have a range of policies to increase the supply of affordable housing. In 2006 they established mandatory employee housing mitigation for planned resorts and non-residential development, with a mitigation rate set at 69%.

The **Town of Telluride** and **San Miguel County** apply mandatory linkage zoning to all new commercial and tourism development and to some new residential development. New developments are required to provide 340 sq. ft. of affordable housing for 40% of the new employees generated by the development.

Since 1975, **Whistler**, British Columbia has adopted a mandatory linkage policy, requiring all new commercial, industrial or tourism businesses to mitigate their impacts on the housing market using an employee-housing service charge.

**Nantucket Island** has adopted both commercial and residential linkage policies, based on the sq. ft. of the development. The residential linkage policy targets second homes over 2,500 sq. ft. Commercial linkage requires affordable dwelling units for commercial developments greater than 4,000 sq. ft. of gross floor area. The fee in lieu payment is set very high and is a strong incentive to the developer to provide the affordable dwelling.

## Web Site References

[www.vailgov.com](http://www.vailgov.com)

[www.eaglecounty.us](http://www.eaglecounty.us)

[www.aspenpitkin.com](http://www.aspenpitkin.com)

[www.townofbreckenridge.com](http://www.townofbreckenridge.com)

[www.co.summit.co.us](http://www.co.summit.co.us)

[www.tetonwyo.org](http://www.tetonwyo.org)

[www.jacksontetonplan.com](http://www.jacksontetonplan.com)

[www.ci.jackson.wy.us](http://www.ci.jackson.wy.us)

[www.town.telluride.co.us](http://www.town.telluride.co.us)

[www.sanmiguelcounty.org](http://www.sanmiguelcounty.org)

[www.whistler.ca](http://www.whistler.ca)

[www.nantucket-ma.gov](http://www.nantucket-ma.gov)

[www.nantuckethousingoffice.org](http://www.nantuckethousingoffice.org)