Tahoe Redevelopment Case Study: Feasibility Analysis

Revitalization and Reinvestment Opportunities
Regulation and Code Analysis and Recommendations

Prepared for:

Tahoe Regional Planning Agency

In Collaboration with:
The Regional Plan Initiative

Prepared by:

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Financial Pro-formas prepared in Collaboration with
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March 8, 2010

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RPP #3650

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March 8, 2010

To: Joanne Marchetta, Executive Director
Harmon Zuckerman, Director, Regional Plan Update

Fr: Darin Dinsmore, Principal, Regional Planning Partners

Re: Tahoe Redevelopment Case Study

Dear Joanne and Harmon:

We are pleased to present our updated Redevelopment Case Study, which includes recommendations organized around policy, regulatory, redevelopment and financial considerations. The specific background and basis for this report is described on pages 6 and 7. As with other documents that are part of the Regional Plan Initiative Package, the purpose of this document is to provide recommendations and inform decision-making involved in the TRPA Regional Plan Update (RPU), Lake Tahoe Environmental Improvement Program (EIP), and the related planning and implementation efforts of Tahoe's local governments. Specific recommendations include:

Policy

- Establish Tools for Successful Redevelopment
- Develop Detailed Corridor Plans for PTOD
- Create New Mixed Use Zones

Regulatory

- Create Shared, Reduced & Maximum Parking Requirements
- Create Focused TDR Receiving Areas
- Create a Streamlined Process for District PTOD

Redevelopment

- Provide Regional Housing Incentives and Assistance
- Improve Local Redevelopment Assistance
- Coordinate District Green Infrastructure Investment

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Additional financial recommendations are also included to support community and environmentally benefiting redevelopment and reinvestment. Finally, we present and urge your consideration of using an EcoDistrict approach to further facilitate redevelopment and water quality improvements into one program. Our suggestions for the EcoDistrict approach can be found, starting on page 57.

Sincerely,

Darin Dinsmore

DARIN DINSMORE
PRINCIPAL

This report was prepared as one in a package of documents collectively referred to as the Regional Plan Initiative (RPI). The analysis and recommendations contained herein were produced as part of a multi-stakeholder effort to inform decision-making involved in the TRPA Regional Plan Update (RPU), Lake Tahoe Environmental Improvement Program (EIP), and the related planning and implementation efforts of Tahoe's local governments. This report would not have been possible without the participation of Lake Tahoe Basin public and private entities seeking to strengthen the linkage between a strong environmental restoration program and a vibrant economy in the Lake Tahoe Basin, including a more informed set of opportunities for private sector business investment in the Lake Tahoe EIP.

The following individuals were among those consulted and who provided input and guidance in the preparation of this report.

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INTRODUCTION AND BACKGROUND

I. Introduction

This report presents a summary of the analysis of the financial feasibility of redevelopment projects to determine the financial impact current regulations and incentives have on project financial feasibility in the Lake Tahoe Basin. For the purposes of this effort, the analysis was developed as an update of the previous financial feasibility analysis prepared for two case studies in the Lake Tahoe Basin (see Section II. Background below). This updated analysis is intended to help better understand the projected financial feasibility of the subject case studies and challenges facing commercial and residential revitalization and reinvestment opportunities in the urbanized areas of the Lake Tahoe Basin. The report summarizes existing conditions and the potential benefits of implementing the subject case study projects. Also examined in this report are conclusions from the financial analysis, policy and project considerations, and recommendations.

II. Background

During the Lake Tahoe Place-Based Planning process, a component of Pathway 2007 and the Regional Plan Update, an economic analysis of three case studies was completed in March 2007 – one in each of the three Place-Based planning sub-regions (Placer County, Washoe County, and South Lake Tahoe, encompassing Douglas and El Dorado Counties). The initial case studies focused on the impact local codes would have on potential redevelopment projects. They were intended to specifically address restrictions imposed on the implementation of redevelopment projects which met the environmental goals of the Basin and the design elements desired by the local community.

As part of the Regional Plan Initiative (RPI), two of the three case studies (Kings Beach and South Lake Tahoe) were updated with more focus on financial feasibility, the identification of any potential financing shortfall ("gap"), and suggested recommendations to try and close the identified "gap". The updated analysis included modifying the development program of these two previous subject case studies in an attempt to achieve financial feasibility.

III. Objectives

The overall objective of updating the subject case studies was to gain a better understanding of challenges in existing and projected real estate market conditions, and the combination of TRPA regional and local government codes on the feasibility of implementing high quality redevelopment or infill development projects. Such projects are those that reflect the values of the local community and provide a net environmental benefit. Investment in existing sites currently demonstrating poor environmental and/or economic performance can produce a "net gain" by reducing environmental impacts of the site and revitalizing its economic performance.

Specifically, the objectives of this updated economic analysis effort were to: 1) update the development pro-formas prepared for the two previous case studies (Kings Beach and South Lake Tahoe) in March 2007, based on updated real estate market conditions, development costs, sales and rental rates, and other assumptions; and 2) prepare alternative development program assumptions including incorporation of new factors affecting the pro-formas such as green building features, streetscape improvements, affordable workforce (employee) housing, other building types, parking alternatives, etc.; and 3) identify potential solutions to address any identified financing shortfall ("gap") of the subject case studies.

IV. Existing Conditions

This section describes the existing conditions of the Kings Beach and South Lake Tahoe case study sites. Of particular interest related to the initial financial feasibility analysis of the two case studies in March 2007 was:

1. Existing site coverage (square feet of coverage of existing buildings and covered surfaces, i.e. pavement). Reducing coverage (and/or incorporating water quality improvements) has been identified as a significant strategy to achieve improved water quality in the Lake Tahoe Basin.

2. Floor-to-Area Ratio (FAR) because FAR is a standard statistic for measuring density or the efficiency at which land is being used; the higher the FAR value, the more efficient

land is being used in comparison with the total building footprint area of a structure (or building footprint for a one-story building).

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A. Kings Beach

Demonstration Program

Case Study Update

Figure 1a - Kings Beach: Existing Site

The Kings Beach case study site is situated in the commercial core of downtown Kings Beach, which was identified as a high priority redevelopment area in Placer County public workshops. It is in close proximity to the Lake, raising the importance of effective water quality control.

The Kings Beach project site is situated in the commercial core of downtown Kings Beach, which is identified as a high priority redevelopment area by Placer County. The site is in close proximity to Lake Tahoe, raising the importance of effective water quality control.

The site in Kings Beach currently has 64% coverage. Paved surfaces on the site take up over 19,000 square feet, almost three times the building coverage (at 6,906 square feet). There are currently no water quality improvements on the site, which is comprised of older, somewhat dilapidated buildings. Two of the buildings face the street (State Highway 28) and provide what could be considered “functional” retail. The remaining buildings provide little commercial/retail function and are not oriented toward the street.

Figure 1 – Kings Beach Existing Conditions

Table 1: Existing Conditions – Kings Beach Case Study

Existing Site Area	40,470 SF
Existing Site Coverage	
Building	6,906 SF
Paving	19,064 SF
Total	25,970 SF
Percentage	64%

B. South Lake Tahoe

Figure 3a - South Lake Tahoe: Existing Site

The South Lake Tahoe site occupies two blocks bisected by an alleyway. Currently the site is heavily covered at 71% (average of the two sites) with over 136,000 square feet of paved area, no water quality improvements and older buildings currently under-utilized. The site is in close proximity to the Lake, just across Highway 50 in the commercial core of South Lake Tahoe.

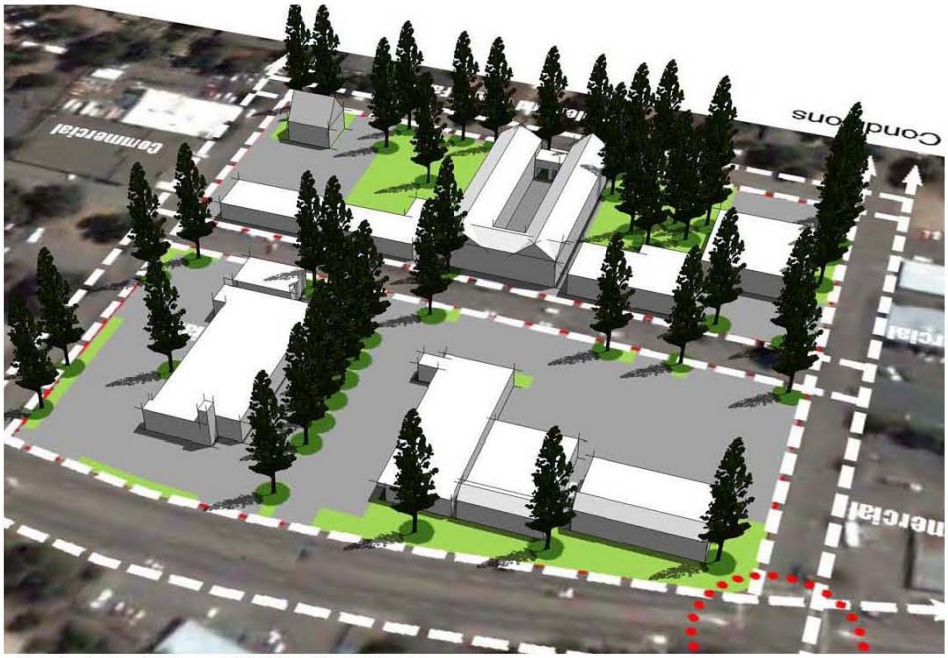

Figure 3 – South Lake Tahoe Existing Conditions

Table 2: Existing Conditions – South Lake Tahoe Case Study

Existing Site Area		
Block 1		162,000 SF (3.72 A)
Block 2		144,000 SF (3.30 A)
Total		306,000 SF (7.02 A)
Existing Site Coverage		
Block 1		77.1%
	Building	39,300 SF (0.24 FAR)
	Paving	85,600 SF
		124,900 SF
Block 2		64%
	Building	41,640 SF (0.29 FAR)
	Paving	50,580 SF
		92,220 SF
Overall	Percentage	71%

V. Development Plan Concepts

This section presents information regarding the development program for each case study site and related changes in site coverage and Floor-Area-Ratio (FAR) which potentially contribute to the desired "net gain" outcome of redevelopment and/or infill development. The case studies analyzed in March 2007 reflected some changes to local codes, but not to any TRPA codes. This was intentional in order to demonstrate the extent local codes impacted the financial feasibility of development. The case study development programs assumed: 1) modified parking requirements related to potential joint use/shared parking solutions; 2) possible use of public street rights of way to accommodate required parking; and 3) more flexibility with building setbacks to create an urban edge along public street rights-of-way.

A. Kings Beach

Figure 4 – Kings Beach Case Study Concept

The Kings Beach case study development program includes retail and residential uses (fractional ownership units). The updated development pro-forma (see Attachment A) is based on modifications to the initial case study development plan (March 2007) as an attempt to try and

improve the overall projected economics and financial feasibility of the case study development program. The modifications included an increase in the number of proposed fractional ownership units from 10 to 20 units (an additional forty (40) fractional ownership units). This translates into an additional 10,000 square feet of building area in a third floor to the new building. In addition, the modified development plan and program includes LEED certification enhancements.

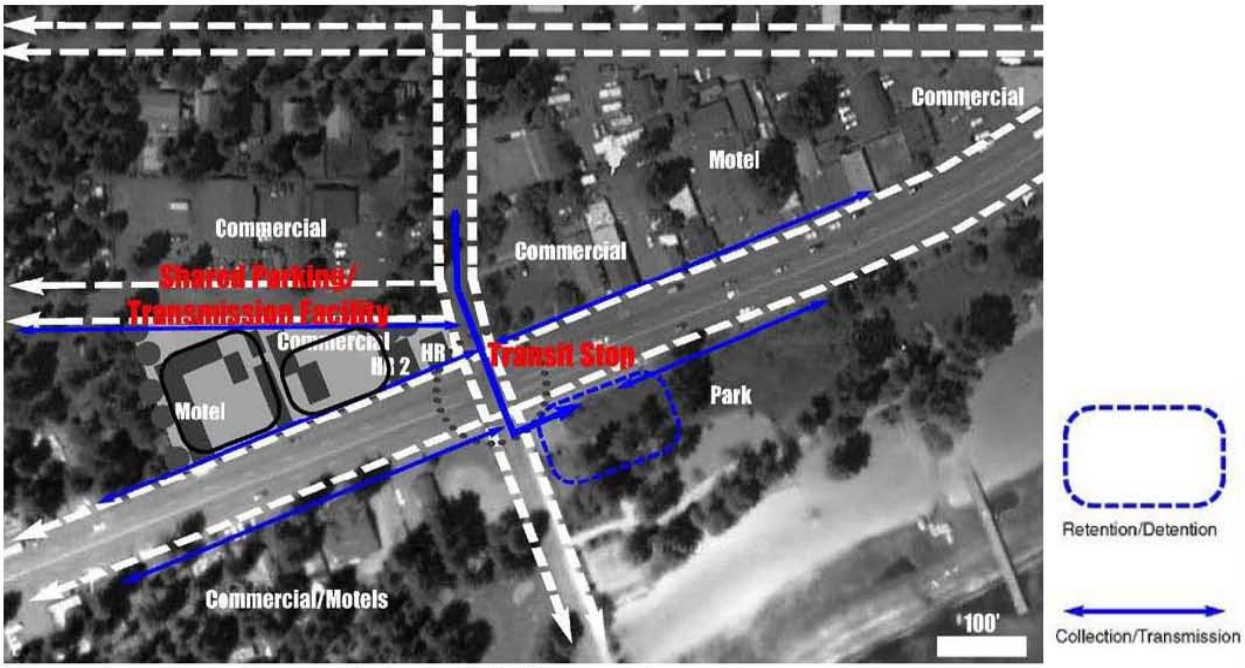

Figure 4a - Kings Beach: Potential BMP concept

The BMP concept illustrated in this diagram conveys an area-wide approach to water quality improvements. It is evident that a solution of this nature would require significant collaboration between local government, TRPA, the developer and multiple property owners.

The updated development pro-forma takes into account the potential effect of the additional residential units (fractional ownership units) on construction costs, indirect costs (design, permit fees, interest, marketing etc.), and revenue and project profitability associated with the increased building square footage. However the estimated project profitability does not take into account likely changes that would further need to occur in the development plan to meet existing TRPA and local government codes.

The following is a partial list of issues related to the modified development plan and program for the Kings Beach case study.

1. To accommodate the additional ten (10) residential units would require additional parking. Due to the size of the case study site, any additional on-site parking might have to be in either above-ground or below ground structures which would be very cost prohibitive.

2. To accommodate the additional ten (10) residential units (fractional ownership units) would require an additional floor to the proposed new building. Current codes do not allow such additional building height, therefore there would need to be either a modification to, or a variance from the existing code to accommodate the additional floor.

3. If permitted, an additional floor to existing building could also accommodate larger units by utilizing roof spaces for a second level in the additional third-floor units. This would increase saleable square footage at a relatively inexpensive cost, and increase the marketability of the residential product.

4. The proposed additional residential square footage could be wholly-owned units (e.g. condominiums) instead of fractional ownership units, if permitted by existing zoning. This approach could: a) lower the project sales risk with only ten (10 units to be sold instead of 40 fractional ownership units); b) lower the overall estimated sales commissions from 12% to 6%; and c) lower estimated indirect costs by not having to furnish the units. However, the market risk would be the practical ability to sell upper end priced units above commercial space fronting on State Highway 28.

5. The initial baseline assumptions were that there were already existing TAUs to accommodate the fractional ownership units. The additional ten (10) residential units (40 fractional ownership units) would require purchase of ten (10) TAUs which could become cost prohibitive due to the likely purchase price of approximately $650,000 (10 units @ $65,000 per unit).

6. Additional commercial square footage as an alternative to additional residential square footage could potentially increase the estimated project profitability but it would increase the developable footprint (increased site coverage) and required parking.

Table 3: Program Description – Kings Beach Case Study

Building Area	
Existing Commercial (Retained/Rehabilitated)	2,500 SF
New Commercial	10,000 SF
Fractional Ownership	20,000 SF
Total	32,500 SF
Parking	30 spaces

The revised Kings Beach case study development program still reduces site coverage by 15.3% and incorporates built-in water quality improvements. The proposed new buildings face the street front and blend in with the restored historic buildings to encourage a pedestrian-oriented commercial area with parking to the rear.

Table 4: Net Gain Data – Kings Beach Case Study

	Existing	New	Net
Floor-Area-Ratio	0.17	0.80	470%
Site Coverage	64%	48.7%	(15.3%)
Trees	8	16	8
BMP Acres	0	0.10	0.10

Kings Beach Design Features**:**

Multi-Use Right of Way

- Shared parking with permeable surfaces
- Bio-swales
- Ground water infiltration and conveyance to BMPs
- Trees and traffic calming
- Sidewalks

Restores Historic Buildings

- Two commercial buildings restored
- Commercial tenants

BMPs

- Bio-swales
- Area-wide water quality improvements

Commercial Uses/Accommodations

- Walking edge along street
- Green Construction
- Shared Parking

Mixed-mode street

- Bike Lanes
- Sidewalks with lighting
- Transit – bus shelters

Note: Potential area-wide approach to water quality improvements. It is evident that a solution of this nature would require significant collaboration between local government, TRPA, the developer and multiple property owners.

B. South Lake Tahoe

Figure 6 – South Lake Tahoe Case Study Concept

The South Lake Tahoe case study development program includes retail, residential (condominiums) and fractional ownership uses. The updated development pro-forma is based on modifications to the initial case study development plan (March 2007) as an attempt to try and improve the overall projected economics and financial feasibility of the case study development program. In addition, the modified development plan and program includes LEED certification enhancements.

The updated development pro-forma (see Attachment "B") reflects the elimination of the previously proposed 15,000 square feet of office commercial space and replacing it with an additional 18,800 square feet of residential (one-bedroom units). The additional residential units would be wholly-owned (condominiums) as these are potentially more profitable, as a result of a lower sales commission, as compared to fractional ownership units; wholly-owned units do not need to be furnished prior to sale; and wholly owned units contribute to the terminal valuation of the property management business. The addition of these units results in the same basic square

footage as the previously proposed office commercial space, so no major site plan modifications are factored into the development pro-forma analysis. Also, because of this modification, the acreage related to the previously proposed office commercial space would now be used in the residential units/acre calculation as outlined in the project summary and would yield a density of approximately 21.2 units per acre.

The close proximity of this site to the lake reinforces the importance of effective water quality control to achieve the desired "net benefit".

Figure 6a - South Lake Tahoe: Potential BMP Concept

Table 5: Program Description – South Lake Tahoe

Building Area	
Retail	15,000 SF
Office	0 SF
Townhouses (Condominiums)	93,600 SF
Townhouses (Fractional Ownership)	33,600 SF
Total	142,200 SF
Parking (Retail)	50 spaces

The South Lake Tahoe case study site was assumed to have included fifty (50) Residential Unit Equivalents (RUEs) on-site for transfer to the new project, in addition to 45,120 square feet of excess CFA (see Section VII). It was assumed that the fifty existing RUEs would be allocated to the fifty largest residential units associated with the proposed development program, so that the excess CFA could lessen the number of required RUEs for the project. The excess CFA was utilized as per the TRPA Conversion Table outlined below and was converted into twelve (12) two-bedroom and thirty-eight (38) one-bedroom units, respectively. The additional fourteen (14) RUEs required to complete the project would need to be purchased on the open market at an estimated cost of approximately $45,000 per unit or a total cost of approximately $630,000, based on information from Feldman Shaw LLP. Overall, the ability to convert excess CFA into RUE/TAUs is a significant benefit as it eliminates the need for the project developer to purchase 50 RUE on the open market at a cost of $2,250,000 (based on estimated cost of $45,000 per RUE).

Modifying the proposed development plan and program by increasing the number of residential units (condominium units) may not help the economic feasibility of the project because the added cost of purchasing RUEs or TAUs could substantially diminish the developers margin per unit to

the point where developing additional residential units would not justify the market risk related to sale of such units. Additionally, building more residential units might require the project to increase in building height for some of the buildings. If the project building heights were to exceed two to three stories it is likely that Type 5 (wood frame) construction may not be feasible and construction with post tension concrete or steel beams might be necessary. If so, this would greatly increase projected hard construction costs which already account for over forty-percent (40%) of the estimated total development cost of the project.

The modified South Lake Tahoe case study development plan and program still substantially reduces site coverage while increasing the floor-area-ratio (FAR) with street-front commercial/retail, and a combination of permanent retail, residential (condominium units) and fractional/visitor accommodation units. The modified case study development program also features built-in water quality improvements.

Table 6: Net Gain Data – South Lake Tahoe Case Study

	Existing	New	Net
Floor-Area-Ratio	0.26	0.47	81%
Site Coverage	71%	43%	(27.8%)
Trees	50	71	21
BMP Acres	0.00	0.78	0.78

South Lake Tahoe Design Features:

Multi-Use Right of Way

- Shared parking with permeable surfaces
- Bio-swales
- Ground water infiltration and conveyance to BMPs
- Trees and traffic calming
- Sidewalks

Residential/Accommodations

- Small alleys with tuck-under parking
- Townhomes/Cabins
- Green Construction

Commercial Uses

- Walking edge along street
- Green Construction
- Shared Parking

Transit

- Bike Lanes
- Sidewalks

BMPs

- Bio-swales
- Area-wide water quality improvements

VI. Financial Analysis

The updated economic analysis for the Kings Beach and South Lake Tahoe subject case studies was prepared by C.R. Russell, Senior Project Manager with Vail Resorts Development Company. The updated development pro-forma for each case study includes program description, estimated development cost (including specific cost assumptions), estimated lease income and/or sales proceeds as applicable, and estimated project value (profitability). The updated development pro-formas are included as Attachments “A” and “B” to this report.

The estimated project value (profitability) is presented for the subject projects under existing TRPA and local government codes and with modifications to existing TRPA and local government codes as indicated into Section V. For the purposes of assessing estimated project profitability, the targeted developer return-on-cost threshold was 20%. This threshold was arrived at following extensive discussions with experienced project developers, lenders, and comparisons with similar resort communities.

VII. Overall Findings

The general findings of the updated development pro-forma information for both the Kings Beach and South Lake Tahoe case studies dated July 7, 2009 are listed below. In general, both of the subject case studies are financially challenged and do not yield net project value sufficient to achieve targeted developer return-on-cost thresholds.

A1. High Development Costs - The largest challenge facing the subject case studies in terms of achieving financial feasibility is the extent of the estimated total development costs due to various factors including, but not limited to the following:

- Higher than normal land acquisition/value costs, even in this current economic downturn, due primarily to proposed acquisition of properties with existing income producing uses (commercial) and the relatively small size of the case study sites (higher per acre/square foot cost)

- Higher than normal predevelopment (entitlement) costs due to the existing complex and layered environmental review and project approval process of TRPA and applicable local government entity; this increases the estimated predevelopment costs due to the extensive time and effort required to pursue approval of proposed projects

- Higher than normal direct construction costs due in part to expectations regarding the quality of design and materials, including inclusion of LEED certification enhancements, which could increase direct construction costs by approximately 3% and indirect costs (architecture/engineering) by approximately 10%

- Lack of cost efficiency for development related costs such as off-site infrastructure, water quality/environmental enhancements (BMPs), etc. due to smaller scale of projects and no current district approach to such improvements; this situation results in high costs associated with such improvements.

A2. Lack of Adequate Net Project Value - Neither case study provides for an estimated net project value that achieves the targeted developer profitability factor of 20%

return-on-cost, even with the development plan and code modifications described in Section V. For the Kings Beach case study the estimated net project value only provides a projected developer return-on-cost of approximately 6% and would require approximately $1.9 million of financing assistance to achieve the targeted economic feasibility. For the South Lake Tahoe case study, the estimated net project value results in a negative 5% projected developer return-on-cost and would require approximately $19.5 million of financing assistance.

A3. Factors to Help Financial Feasibility – The updated analysis of the two subject case studies indicate that certain factors could assist in potentially increasing the economic productivity of proposed mixed-use or infill development. Such factors include: a) increase in allowable density in appropriate areas; b) increase in allowable building heights in appropriate areas; c) modified parking standards to allow joint use/shared parking, use of existing street right-of-way for on-street parking to meet portion of required parking; d) installation of infrastructure, transportation and water quality/environmental improvements on a district basis. Height and density regulations need to be made more predictable and mapped based on context, design and environmental performance.

B. Financial Subsidy (GAP)

Based on the development pro-formas for the Kings Beach and South Lake Tahoe case studies (including the stated underlying assumptions) the projected financial subsidy to make the subject projects economically feasible would be as follows:

Kings Beach – approximately $2.6 million or 26.4% of the estimated total development cost under current TRPA and local government codes; and approximately $1.9 million or 14.0% of the estimated total development cost with modifications to the current TRPA and local government codes and development program as described above in Section V.A.

South Lake Tahoe – approximately $22.9 million or 29.0% of the estimated total development cost under current TRPA and local government codes; and approximately $19.5 million or 24.8% of the estimated total development cost with modifications to the current TRPA and local government codes and development program as described in Section V.B.

As indicated, the potential effect of being able to develop the subject case studies with modifications to the current TRPA and local government codes (and development program as

described in Sections V.A. and V.B.) is to reduce the required amount of financial subsidy by approximately 15% to 26%.

Looking at the same figures in another way - to facilitate $100 million of private investment would require approximately $14 to $26 million in financial subsidy for prospective developments similar in nature to the Kings Beach case study; and approximately $25 to $29 million in financial subsidy for prospective developments similar in nature to the South Lake Tahoe case study.

VIII. Recommendations

TRPA and local governments within the Basin have available a variety of tools and best practice capabilities that can contribute to the financial performance of proposed projects that deliver tangible environmental benefits. Unless TRPA and the local governments in the Basin collaboratively identify and implement actions intended to increase the potential financial feasibility of proposed development, it will be extremely difficult to attract private capital investment in the existing urbanized areas of the Basin. The lack of private investment in these areas will jeopardize the achievement of mandated water quality standards and other environmental improvements.

The recommended actions are intended to help improve the financial performance of proposed mixed-use or infill development as indicated under each subsection below. Overall, the recommended actions address potential reduction of cost items that collectively constitute approximately 20% to 25% of the estimated total development costs of the subject case study projects; and potential increase in economic productivity, which could help reduce required financial subsidy by 15% to 26%.

One of the overall recommendations that will assist with policy, planning, regulatory, redevelopment and finance for PTOD implementation in priority redevelopment areas is the creation of an **EcoDistrict Program** for the Basin, focused on the implementation of high performing neighborhoods. This concept is outlined in section IX at the conclusion of this report.

Policy and Planning Actions

The recommended policy and planning actions listed below could help improve the financial performance of mixed-use or infill development by: 1) potentially reducing the need (cost) of acquiring additional commodities (e.g. TAUs, RUEs, etc.); and 2) providing more certainty in the

land use entitlement process (potentially reducing predevelopment/entitlement costs which constitute 3% to 4% of the estimated total development costs of the case study projects).

P1. Establish Tools for Successful Redevelopment

TRPA should incorporate into the Regional Plan Update a transect based zoning system which would apply different standards for targeted development including:

A. Manage Parking

Introduce parking standards to encourage shared parking, parking structures, etc. in community plan areas (T4/T5).

B. Allocate Incentives Based on Location and Environmental Performance

CFA, TAUs and Bonus Units should be awarded to projects that qualify under the special projects program as follows: a) transfer of existing CFA at a ratio of 1:1; and b) transfer of existing TAUs and RUs from sensitive land as a matching development right at a ratio of 1:1

C. Establish Transfer of Commodities based on Square Footage

Commodities should be able to be transferred or exchanged based on a square footage basis based on a preliminary unit of use conversion table as follows:

Commercial	300	=	One (1) TAU; no kitchen ; one (1) B & B bedroom
Commercial	600	=	One (1) TAU/bedroom; kitchen; TAU/each additional
Commercial	300	=	One (1) bedroom
Commercial	1500	=	One (1) Residential Unit/3-bedroom
Commercial	1200	=	One (1) Residential Unit/2-bedroom
Commercial	900	=	One (1) Residential Unit/1-bedroom
Commercial	600	=	One (1) Residential Unit/studio

P2. Develop Detailed Corridor Plans for PTOD

Concurrent with the Regional Plan Update, local governments (including local redevelopment agencies), should designate specific areas/nodes along commercial corridors within existing urbanized areas for future mixed-use or infill development. This could be accomplished in the context of detailed corridor plans with strategies for redeveloping existing underutilized commercial uses, transitioning such areas to mixed-use or infill development centers, and identifying/achieving the type of financially realistic proposed uses. The national mainstreet program 4 step framework of economic restructuring, promotion, design, and organization would help implement the needed physical changes and management to ensure successful implementation.

P3. Create New Mixed Use Zones

In the context of such corridor plans, local governments in the Basin, in conjunction with TRPA, should establish codes and standards that would support development in the designated mixed-use or infill development areas/nodes. This could include establishing new simplified mixed-use district zoning designations with varying focuses, e.g. commercial mixed-use, residential mixed-use, employment mixed-use, etc.

Regulatory Actions

The recommended regulatory actions (Recommendations 1 and 2) listed below could help improve the financial performance of mixed-use or infill development by increasing the economic productivity through increased allowable density, additional building height, etc. As indicated in the subject case study development pro-formas, modifications to the existing TRPA and local government codes could help reduce the required financial subsidy by approximately 15% to 26%. Recommendation P3 could help reduce the estimated cost of predevelopment/entitlement activities. This recommendation addresses approximately 3% to 4% of the estimated total development costs of the subject case studies.

R1. Create Shared, Reduced & Maximum Parking Requirements

Local governments, in collaboration with the Regional Plan Update, should establish parking standards that help facilitate desired mixed-use or infill development by reducing requirements for certain uses/product types, reducing requirements for joint use/shared parking solutions, using a district-approach to required parking, and providing for the use of on-street parking to satisfy certain portion of on-site parking requirements.

R2. Create Focused TDR Receiving Areas

TRPA should modify its Code of Ordinances to permit: a) increased allowable density (for example, increase of five (5) units per acre); b) increased allowable building height in the appropriate context of the subject area (for example, increasing to three (3) to four (4) stories with usable area under the roof structure); c) include the BMP area in the calculation of allowable density for projects that provide for improved water quality, air quality, transit use, affordable (workforce) housing, economic development and other types of desired benefits.

R3. Create a Streamlined Process for District PTOD Redevelopment

TRPA and local governments within the Basin should improve the existing project approval/entitlement process by establishing an streamlined process with a maximum stipulated period for review (approve/disapprove) of proposed mixed-use or infill development consistent with approved community plans, master plans or redevelopment plans and that deliver a “net gain”. It is recommended that this include establishing a coordinated (simplified) single development application, environmental review/documentation process, and coordinated design review.

Development/Redevelopment

The recommended development/redevelopment actions listed below (specifically Recommendations D2 and D3) could help improve the financial performance of mixed-use or infill development by potentially reducing estimated costs of land acquisition/assembly, off-site public improvements, and water quality improvements. These items collectively constitute approximately 11% to 18% of the estimated total development costs of the subject case studies.

D1. Provide Regional Housing Incentives and Assistance

TRPA and local governments should coordinate efforts to address the Basin's affordable workforce housing needs. The focus of this effort should be to provide incentives (TPRA and local government) and financial assistance (local governments) for such housing within designated mixed-use or infill development areas - particularly transit nodes where residents could rely on public transportation. Potential affordable workforce housing types could include for-sale and rental, first time home buyer, and live-work (residential above a studio). As an example, live-work units could assist in corridor transitions and provide opportunities for home-based businesses to evolve and grow.

D2. Improve Local Redevelopment Assistance

In established redevelopment project areas, applicable local government should provide assistance related to: a) acquisition and assembly of property in order to create sites suitable for desired mixed-use or infill development, and potentially dispose of such sites through sale or lease for private development potentially at below-market values; and/or b) financial assistance for proposed projects in designated mixed-use or infill development areas/nodes that provide for a "net gain" if such financing assistance is determined to be necessary/warranted to make the proposed development financially feasible.

D3. Coordinate District Green Infrastructure Investment

In designated mixed-use or infill development areas/nodes, TRPA and local governments within the Basin should initiate a district-approach for installation of future public infrastructure and environmental/water quality improvements (e.g. BMPs) through land-secured improvement districts (e.g. Mello-Roos, Community Facility Districts) as a means to facilitate desired development in such areas. This would assist in potentially reducing the on/off-site improvement costs of future proposed development, as well as providing a mechanism for on-going maintenance and management.

Financial Incentives

The recommended financial actions listed below could help improve the financial performance of mixed-use or infill development by potentially reducing the estimated cost of off-site public improvements, water quality improvements and building permit/development impact fees. These items collectively constitute approximately 5% to 7% of the estimated total development costs of the subject case study projects. In addition, the allocation of commodities such as TAUs, RUEs etc., at a reduced rate, could help reduce costs to acquire such commodities which could range from approximately $45,000 to $65,000 per unit.

F1. Establish Partnerships for Funding/Project Implementation

TRPA and local governments within the Basin should jointly pursue federal and state funding (grants and loans) to assist in the cost of installing public infrastructure, transportation, and water quality/environmental improvements to accommodate redevelopment and revitalization activities in designated mixed-use or infill development areas/nodes.

F2. Establish Fee Reductions in Priority Redevelopment Areas

TRPA and local governments within the Basin should consider a reduction of building and development impact fees for proposed development in designated mixed-use or infill development that is consistent with adopted community plans, master plans or redevelopment plans, as applicable.

F3. Create Financial Incentives for District Storm Water Treatment

For the Environmental Improvement Program (EIP), TRPA should establish criteria for priority allocation of financing for funding water quality/environmental improvements associated with proposed development in designated mixed-use or infill development areas/nodes that provide water quality/environmental solutions on an area-wide or district-approach (beyond the project site area).

F4. Build a Public Allocation Pool for Special Project Assistance

TRPA and/or local governments, as appropriate, should consider establishing a program to acquire and allocate certain development allocations (e.g. TAUs, RUEs, etc.) at a reduced rate as a financial contribution to proposed development in designated mixed-use or infill development areas/nodes that provides for improved water quality, air quality, transit use, affordable (work force) housing, economic development and other types of desired benefits.

F5. Coordinate PTOD Implementation and Management

TRPA and local governments within the Basin should continue to pursue the creation of innovative financing approaches and mechanisms such as the financing model used in co-housing, non-profit development corporations, Joint Powers Authority, Business Improvement Districts, Tax Increment Finance Districts, Landscape and Lighting Districts, etc.

These areas should be identified on the Regional Plan implementation maps and have corresponding management tasks outlined in the Regional Plan Implementation Element and corresponding Community Plans.

ATTACHMENT A – KINGS BEACH PROJECT

Initial Summary: Proposed coverage will be 19,640 feet versus the 25,970 feet currently, which is a net reduction of 15%. The site is located in the commercial core area of Kings Beach and no water quality improvements are located on a site that is primarily paved over. The new project would propose one new 10,000ft commercial building, 10 1000ft timeshare condos (13wk intervals), and 30 parking spaces. The there will be eight new trees planted on top of the existing eight. Paving will be about ¼ of what is currently in place (19000ft) and about 3540 feet of walks will be installed. Lastly, two small historic buildings consisting of a 972 Storefront building and a 1512 ft converted cottage will be kept. Building heights will be no more than 30' if existing code used. Building to be "green" construction.

Development Cost and Valuation Assumptions:

1) Acquisition Price: Need to verify if $40/ft is still valid. This translates into a $1.6 cost for .93 acres of primarily commercial property.
2) Building Construction Costs (assuming $5/ft GC's, $12/ft for onsite, plus 5% fee and 10% contingency) still seems very low at $140/ft for retail and $200/ft for residential. Green construction costs would likely add a minimum of 5% to building construction costs and 10% to Architectural/Engineering costs. I would assume a building cost of $300ft at a minimum for residential and $200ft for white box retail. This would assume a contractor more of the size (less GC's and overhead) required for a project of this smaller size as well as the cost of "green" or LEED construction. One area of particular question is the Note at bottom of page that says development costs do not include public infrastructure, utility upgrade costs and site remediation. All of these can be major costs and would likely be expected in an infill project of this type. Also, what (if any) are the costs to remodel or renovate the existing historical structures as developer would likely not want "dilapidated" structures within his property as this would hinder sales/leasing.
3) Sales Pace: Current projects show a 50% presale and 6 month sales period. I think its fair to assume a 50% presale as you would never start a project without it. However, as 3-month absorption, especially considering timeshare is probably very aggressive. I would assume a minimum of 12-18 months considering condos are being sold in otherwise dated commercial core and more reflective of market conditions.
4) Insurance Fee: Probably on the low end. As they are for sale condos and commercial, it is assumed this would be a type 5 wood framed project. Commercial would likely not be. Based on a current 22 unit type 5 townhome for

sale project VRDC is doing, the CCIP or OCIP policy would likely be closer to $200-300K

5) Commercial Vacancy Rate: May be higher than 5%. Need to verify current rates for similar product/location.
6) Price per Square Foot: Cannot verify what it is. Appears it is $145,000 per 13wk ownership or $145/ft. This would translate into $580/ft. May be too high for area.
7) General Contractor Fee: May be too high. A project of this size may be more in the range of 3-4%. Minimal cost effect.
8) Cost of Sales: May be able to get 5% now instead of 6%.
9) Developer Fee/Profit: Says 10% of gross sales. May be light in current risk environment.
10) Commercial Value (table 10): Does not show a terminal valuation but looks like it would be in excess of $400-500K? There is an assumption of a 7% cap rate. Is this feasible?

Kings Beach Case Study
Kings Beach, California

Table 1:
Program Description

I. Site/Land Area		
Square Feet	40,470	
Acres	0.93	
II. Site Coverage		
Existing		
Building	6,906	
Paving	19,064	
Total		25,970
		64.2%
Proposed		
Building	12,500	
Paving	7,140	
Total		19,640
		48.5%
II. Uses		
Existing Commercial		
No. of Buildings	Two (2)	
Gross Area (SF)	2,500	
Net Leasable Area (SF)	2,375	
New Commercial		
No. of Buildings	One (1)	
Gross Area (SF)	10,000	
Net Leasable Area	9,500	
Fractional Ownership		
No. of Buildings	One (1)	
Units	20	
Unit Size (SF)	1,000	
Gross Area (SF)	20,000	
On-site Parking (Commercial)		
Spaces	30	
Ratio	3/1,000 SF	

Footnotes:
(1) One building with ground floor commercial/retail and second level fractional ownership units

Kings Beach Case Study
Kings Beach, California

Table 2:
Estimated Total Development Cost

	Existing Commercial	New Mixed-Use	Total	Percentage of Total Costs
I. Land				
Acquisition	$ 142,454	$ 1,152,586	$ 1,295,040	9.51%
Demolition	$ -	$ 44,060	$ 44,060	0.32%
Site Preparation	$ 12,900	$ 104,600	$ 117,500	0.86%
Total: Land	$ 155,354	$ 1,301,246	$ 1,456,600	10.70%
II. Direct Construction				
General Conditions	$ 10,802	$ 87,398	$ 98,200	0.72%
Off-site Improvements	$ 22,200	$ 179,800	$ 202,000	1.48%
On-site Improvements	$ 9,400	$ 76,300	$ 85,700	0.63%
BMP	$ 5,000	$ 40,000	$ 45,000	0.33%
Asbestos Abatement	$ 2,279	$ 18,439	$ 20,718	0.15%
Building Construction				0.00%
Commercial	$ -	$ 1,500,000		0.00%
Fractional Ownership	$ -	$ 4,600,000		0.00%
Total	$ -	$ 6,100,000	$ 6,100,000	44.82%
Rehabilitation	$ 187,500	$ -	$ 187,500	1.38%
Tenant Improvements	$ 100,000	$ 400,000	$ 500,000	3.67%
LEED Construction	$ 10,115	$ 206,505	$ 216,620	1.59%
Contingency (10%)	$ 34,730	$ 709,000	$ 743,730	5.46%
Contractor Fee (no fee: Owner built)	$ -	$ -	$ -	0.00%
Contractor CCIP Policy	$ 3,820	$ 77,990		0.00%
Bonds	$ 3,372	$ 78,770	$ 82,142	0.60%
Total: Direct Construction	$ 389,218	$ 7,955,763	$ 8,344,981	61.31%
III. Indirect				
Predevelopment	$ 23,353	$ 477,346	$ 500,699	3.68%
Architecture & Engineering	$ 27,245	$ 556,903	$ 584,149	4.29%
LEED Design & Commissioning	$ 2,725	$ 55,690	$ 58,415	0.43%
Fees & Permits	$ 50,000	$ 600,000	$ 650,000	4.78%
Taxes, Legal & Insurance	$ 11,677	$ 233,970	$ 245,647	1.80%
Marketing	$ 7,784	$ 159,115	$ 166,900	1.23%
FF&E for Fractional		$ 500,000	$ 500,000	3.67%
Interior Design Fee		$ 60,000	$ 60,000	0.44%
Leasing Commissions	$ 12,500	$ 50,000	$ 62,500	0.46%
Contingency (5%)	$ 6,764	$ 134,651	$ 141,415	1.04%
Total: Indirect	$ 142,048	$ 2,827,676	$ 2,969,724	21.82%
IV. Financing				
Construction/Permanent Loan Fees	$ 7,210	$ 126,889	$ 134,099	0.99%
Interest during Construction	$ 39,000	$ 370,000	$ 409,000	3.00%
Interest during Sales (Residential)	$ -	$ 297,000	$ 297,000	2.18%
Total: Financing	$ 46,210	$ 793,889	$ 840,099	6.17%
TOTAL				
With Land	$ 732,830	$ 12,878,574	$ 13,611,404	
Per SF	$ 308	$ 416	410.19	
Without Land	$ 577,476	$ 11,577,329	$ 12,154,804	
Per SF	$ 232	$ 337	$ 332	

Note:
Estimated development cost does not include: 1) public infrastructure or utility upgrades; 2) site remediation

Table 3:
Estimated Commercial Lease Income

	Area (SF)	Monthly Rent	Annual Rent	Annual Income
I. Rental Income				
Commercial - Rehabilitation	2,375	$ 2.25	$ 27.00	$ 64,125
Commercial - New	9,500	$ 2.50	$ 30.00	$ 285,000
Total:	11,875			$ 349,125
Less: Vacancy (5%)				$ (17,456)
Tenant Reimbursements		$ 0.25	$ 3.00	$ 35,625
Effective Gross Income				$ 367,294
II. Operating Expenses				
Management				
Maintenance				
Taxes				
Insurance				
Re-leasing				
Reserves				
Total:				$ (62,500)
III. Annual Net Operating Income				$ 304,794

Development Cost Assumptions

I. Land

Acquisition	$	32.00	per SF of existing land area (assumed 20% less than 3/07 prices)
Demolition	$	10.00	per SF of building area
Site Preparation	$	5.00	per SF of site area

II. Direct Construction

General Conditions	$	5.00	per SF of site area (Owner built project)
Off Site Improvements	$	250.00	per LF of public street frontage
On Site Improvements	$	12.00	per SF of site area
BMP	$	10.00	per SF; no cost included for ongoing operation and maintenance
Asbestos Abatement	$	3.00	per SF of demolished buildings
Building Construction	$	150.00	per SF for Retail $ 230.00 per SF for Residential
Rehabilitation	$	75.00	per SF
Tenant Improvements	$	40.00	per SF of leasable area
LEED Construction		3%	of Direct Construction Cost (no GC Fee, Bonds or CCIP included)
Bonds		1%	of Building Construction Cost
Contractor CCIP		1%	of Building Construction Cost (lower than 2% fee if GC involved)
Contractor Fee		0.0%	of Building Construction Cost
Contingency		10%	of Direct Construction Cost (Hard Cost only)

III. Indirect

Predevelopment		6%	of Direct Construction Cost
Architecture & Engineering		7%	of Direct Construction Cost
LEED Design & Commissioning		10%	of Architecture/Engineering Costs
Fees & Permits	$	20.00	per SF of building area
Purchase of ERU's	$	45,000.00	per ERU needed to be purchased on open market
Purchase of TAU's	$	65,000.00	per TAU needed to be purchased on open market
Taxes, Legal, & Insurance		3%	of Direct Construction Cost
Marketing		2%	of Direct Construction Cost
FF&E Procurement	$	25,000.00	per Fractional Unit
Interior Design Fee	$	3.00	per SF of Residential Space
Leasing Commissions	$	5.00	per SF of leasable area (retail commercial)
Contingency		5%	of indirect costs

IV. Financing

Loan Fees	1.50%	of estimated construction loan amount including an additional 1% for permanent loan financing
Interest During Construction	7.50%	interest rate, 25yr term, 70% loan-to-cost ratio, 12 month construction period
Interest During Sales		50% pre-sales; 24 month absorption for completion of sales

Notes:

1. Estimated total development costs do not include: a) public infrastructure and utility upgrades; 2) site remediation

Table 4:
Estimated Fractional Ownership Unit Sale Proceeds

	Units	Fractional Units (1)	Unit Size (SF)	Price Per SF	Sale Price	Sale Proceeds
I. Sale Proceeds						
Fractional Ownership Units (1)	20	80	1,000	$ 150	$ 150,000	$ 12,000,000
Total:						
Less: Cost of Sales/Closing (12%)	12%					$ (1,440,000)
II. Net Sale Proceeds						$ 10,560,000

Footnotes:
(1) Based on each unit (20) being sold for 13-week intervals

Table 5:
Estimated Project Value

	Project Under City/TRPA Codes	Project w/ Modifications from City/TRPA Codes
I. Commercial		
Net Operating Income (see Table 3)	$ 304,794	$ 304,794
Project Value (8.0% Capitalization Rate)	$ 3,809,922	$ 3,809,922
II. Condominiums (Fractional Ownership)		
Net Sale Proceeds (see Table 4)	$ 5,280,000	$ 10,560,000
Project Value	$ 5,280,000	$ 10,560,000
III. Summary		
Commercial/Retail	$ 3,809,922	$ 3,809,922
Fractional Ownership	$ 5,280,000	$ 10,560,000
Total	$ 9,089,922	$ 14,369,922
Less: Development Cost	$ 9,775,034	$ 13,611,404
Net Project Value	$ (685,112.49)	$ 758,518
IV. Value of Unused Site Coverage		
Unused Site Coverage (1)	6,192 SF	6,192 SF
Estimated Value (2)	$ 61,920.00	$ 61,920.00
VII. Value of Surplus TAU's/ERU's (if applicable)		
Surplus TAU's/ERU's	**$ -**	**$ -**
Potential Net Project Value: Margin on Cost %	**-6.38%**	**6.03%**
Potential Net Project Value: Net CF ($)	**$ (623,192)**	**$ 820,438**
Project Percentage "Gap" to 20% Developer Hurdle Rate	**26.38%**	**13.97%**
Project Dollar "Gap" to 20% Developer Hurdle Rate	**$ 2,578,199**	**$ 1,901,843**

Footnotes:
(1) Based on difference of existing site coverage (64.0%) and proposed project site coverage (48.7%)
(2) Based on $10.00 per square foot (Market Value of Land Coverage in Lake Tahoe Basin, John-Perkins and Associates, Inc., January 26, 2006)

ATTACHMENT B – SOUTH LAKE TAHOE PROJECT

Initial Summary: Proposed coverage will be 132,000 square feet or 43% of site vs. prior development of 71%. The site is 7 acres. For Phase One there will be (3) commercial buildings, 24 fractional townhome units (14 @ 1200ft & 10 @ 1600ft). There will be 100 onsite parking spaces. For Phase 2 of the project there will be 20 condos (16 @ 1600 ft and 4 @ 1200ft), there will also be 24 fractional townhomes. 13-week intervals will be what timeshares are sold in. There will be 21 new trees for this project. It says "green" construction" so assume this will be LEED certified. Also a collection/transmission facility for 6-block water quality project will be provided. Building heights will be no more than 30' if existing code used.

Darin's 1/29/09 Progress Draft: Need to verify if same site as it says Bijou/Al Tahoe Community Plan for Development Standards.

Development Cost and Valuation Assumptions:

1) Acquisition price of $50/ft or $15.785M for 7 acre site may be high in given market environment or future environment
2) Building Construction Costs (assuming $5/ft GC's, $12/ft for onsite, plus 5% fee and 10% contingency) still seems very low at $140/ft for retail and $200/ft for residential. Green construction costs would likely add a minimum of 5% to building construction costs and 10% to Architectural/Engineering costs. I would assume a building cost of $325ft at a minimum for residential and $225ft for white box retail. This would assume a quality of construction similar to Marriott. One area of particular question is the Note at bottom of page that says development costs do not include public infrastructure, utility upgrade costs and site remediation. All of these can be major costs and would likely be expected in an infill project of this type.
3) Construction period – 12 months may be low considering demo work and on/offsite improvements expected. However, this would depend on type of GC hired.
4) Sales Pace: Current projects show a 50% presale and 6 month sales period. I think its fair to assume a 6-month presale as you would never start a project without it. However, as 6-month absorption, especially considering timeshare is probably very aggressive. I would assume a minimum of 12-18 months considering timeshares amplify the # of buyers required.
5) Insurance Fee: Probably on the low end. As they are townhomes, it is assumed this would be a type 5 wood framed project. Commercial would likely not be. Based on a current 22 unit type 5 townhome for sale project VRDC is doing, the CCIP or OCIP policy would likely be closer to $400-500K
6) Cost of Sales: May be able to get 5% instead of 6% in this market or in good market considering # of units giving broker.
7) Commercial Vacancy Rate: May be higher than 5%. Need to verify current rates for similar product/location.
8) Price per Square foot actually seems low, but may be on a fractional basis. If it is on 13 week intervals, it would translate into $600-640ft. This may be pushing the

market considering location is not lakefront or ski-in location. $450-$550 may be more realistic in market environment.

9) Developer Fee/Profit: Says 10% of gross sales. May be light in current risk environment.
10) Commercial Value (table 10): Does not show a terminal valuation but looks like it would be in excess of $1.5M.?

South Lake Tahoe Case Study
South Lake Tahoe, California

Table 1:
Program Description

I. Site/Land Area

Square Feet	306,000
Acres	7.02
Uses	
Retail/Commercial	0.855
Residential/Fractional Ownership	5.385
BMPs	0.78
	7.02

II. Site Coverage

	Existing	Proposed	Difference
Buildings	80,940	46,220	34,720
Paving	136,180	85,840	50,340
Total	217,120	132,060	85,060
	70.90%	43.20%	27.70%

III. Existing Sq. Footage (Estimated from TRPA Case Study pg. 5)

	Block 1	Block 2	Total
Commercial	39,300	20,820	60,120
50 Room Motel (50 TAU's)		20,820	20,820

IV. Proposed Uses

Retail (Lease)	
Building Area (SF)	15,000
On-site Parking Space	50
Ratio	3/1,000 SF
Office (Lease)	
Building Area (SF)	0
On-site Parking	0
Ratio	0
Excess CFA	45,120

Townhouses (Condominiums)				
No. of Buildings				11
No. of Units	Units	Bedrooms	Sq. Ft	84
Unit Size (SF)	40	1	800	32,000
	22	2	1,200	26,400
	22	3	1,600	35,200
Building Area (SF)				93,600
Townhouses (Fractional Ownership)				
No. of Buildings				6
No. of Units (and size)	Units	Bedrooms	Sq. Ft	30
Unit Size (SF)	12	1	800	9,600
	12	2	1,200	14,400
	6	3	1,600	9,600
Building Area (SF)				33,600

Existing 50 TAU's Allocated Against Largest Units

	Total Extra Units	
Total Excess CFA Conversion	45,120	Can be converted into 12 two-bedroom and 38 one-bedroom units

Need to Purchsed 14 One Bedroom ERU's for equally sized residential units to be built ILO 15,000ft office space.

ERU's left to be purchased after CFA Conversion	14
Overall Density	
Total No. of Units	114
Site Area (Residential)	5.385 acres
Density (Units/Acre)	21.2

Table 2:
Estimated Development Cost - Retail/Office Condominiums

	Retail Lease Space	Office Lease Space	Total Commercial
I. Land			
Acquisition	$ 1,592,800	$ -	$ 1,592,800
Demolition	$ 94,000	$ -	$ 94,000
Site Preparation	$ 149,400	$ -	$ 149,400
Total: Land	$ 1,836,200	$ -	$ 1,836,200
II. Direct Construction			
General Conditions	$ 207,900	$ -	$ 207,900
Off-site Improvements	$ 119,500	$ -	$ 119,500
On-site Improvements	$ 160,500	$ -	$ 160,500
BMPs	$ 43,000	$ -	$ 43,000
Asbestos Removal/Disposal	$ 25,614		$ 242,820
Building Construction	$ 2,250,000	$ -	$ 2,250,000
Tenant Improvements	$ 600,000	$ -	$ 600,000
LEED Construction	$ 102,195	$ -	$ 102,195
Contingency (10%)	$ 350,871	$ -	$ 350,871
Contractor Fee (4.5%)	$ 173,681	$ -	$ 173,681
OCIP	$ 80,665	$ -	$ 80,665
Bonds	$ 40,333	$ -	$ 40,333
Total: Direct Construction	$ 4,154,259	$ -	$ 4,371,465
III. Indirect			
Predevelopment	$ 249,256	$ -	$ 249,256
Architecture & Engineering	$ 290,798	$ -	$ 290,798
LEED Design & Commissioning	$ 29,080	$ -	$ 29,080
Fees & Permits	$ 300,000	$ -	$ 300,000
Taxes, Legal & Insurance	$ 124,628	$ -	$ 124,628
Marketing	$ 166,170	$ -	$ 166,170
FF&E Procurement	$ -		$ -
Interior Design Fee	$ -	$ -	$ -
Leasing Commissions	$ 75,000	$ -	$ 75,000
Contingency (5%)	$ 61,747	$ -	$ 61,747
Total: Indirect	$ 1,296,678	$ -	$ 1,296,678
IV. Financing			
Construction/Permanent Loan Fees	$ 109,307	$ -	$ 109,307
Interest during Construction	$ 185,000	$ -	$ 185,000
Total: Financing	$ 294,307	$ -	$ 294,307
TOTAL			
With Land	$ 7,581,445	$ -	$ 7,798,651
Per SF	$ 490	$ 484	$ 487
Without Land	$ 5,745,245	$ -	$ 5,962,451
Per SF	$ 341	$ 335	$ 338

Note: Estimated development cost does not include: 1) public infrastructure and utility upgrades; 2) site remediation

Table 2A:
Estimated Total Development Cost - Townhomes (Condominiums/Fractional Ownership)

	Townhomes (Condominiums)	Townhomes (Fractional Ownership)	Total Residential
I. Land			
Acquisition	$ 7,520,320	$ 3,482,880	$ 11,003,200
Demolition	$ 510,400	$ 205,100	$ 715,500
Site Preparation	$ 610,500	$ 326,200	$ 936,700
Total: Land	$ 8,641,220	$ 4,014,180	$ 12,655,400
II. Direct Construction			
General Conditions	$ 790,680	$ 454,080	$ 1,244,760
Off-site Improvements	$ 594,500	$ 261,000	$ 855,500
On-site Improvements	$ 518,900	$ 350,600	$ 869,500
BMPs	$ 203,000	$ 94,000	$ 297,000
Asbestos Removal/Disposal	$ 159,831	$ 57,375	$ 217,206
Building Construction	$ 21,528,000	$ 7,728,000	$ 29,256,000
Tenant Improvements	$ -	$ -	$ -
LEED Construction	$ 713,847	$ 268,352	$ 982,199
Contingency (10%)	$ 2,450,876	$ 921,341	$ 3,372,217
Contractor Fee (4.5%)	$ 1,213,184	$ 456,064	$ 1,669,247
OCIP	$ 563,456	$ 211,816	$ 775,273
Bonds	$ 281,728	$ 105,908	$ 387,636
Total: Direct Construction	$ 29,018,002	$ 10,908,536	$ 39,926,538
III. Indirect			
Predevelopment	$ 1,741,080	$ 654,512	$ 2,395,592
Architecture & Engineering	$ 2,031,260	$ 763,597	$ 2,794,858
LEED Design & Commissioning	$ 203,126	$ 76,360	$ 279,486
Fees & Permits	$ 1,872,000	$ 672,000	$ 2,544,000
Purchase of ERU's not with Land	$ 630,000	$ -	$ 630,000
Purchase of TAU's not already owned	$ -	$ -	$ -
Taxes, Legal & Insurance	$ 870,540	$ 327,256	$ 1,197,796
Marketing	$ 1,160,720	$ 436,341	$ 1,597,062
FF&E Procurement		$ 900,000	$ 900,000
Interior Design Fee	$ 280,800	$ 100,800	$ 381,600
Leasing Commissions	$ -	$ -	$ -
Contingency (5%)	$ 439,476	$ 196,543	$ 636,020
Total: Indirect	$ 9,229,003	$ 4,127,410	$ 13,356,413
IV. Financing			
Construction Loan Fees	$ 703,323	$ 285,752	$ 989,075
Interest during Construction	$ 1,072,269	$ 426,200	$ 1,498,469
Interest during Sales (Residential)	$ 1,913,654	$ 554,000	$ 2,467,654
Total: Financing	$ 3,689,246	$ 1,265,952	$ 4,955,198
TOTAL			
With Land	$ 50,577,471	$ 20,316,078	$ 70,893,549
Per SF	$ 420	$ 464	$ 435
Without Land	$ 41,936,251	$ 16,301,898	$ 58,238,149
Per SF	$ 315	$ 351	$ 328

Note: Estimated development cost does not include: 1) public infrastructure and utility upgrades; 2) site remediation

South Lake Tahoe Case Study
South Lake Tahoe, California

Table 2B:
Summary of Estimated Total Development Cost

	Commercial	Residential	Total	Percentage of Total Costs
I. Land				
Acquisition	$ 1,592,800	$ 11,003,200	$ 12,596,000	16.05%
Demolition	$ 94,000	$ 715,500	$ 809,500	1.03%
Site Preparation	$ 149,400	$ 936,700	$ 1,086,100	1.38%
Total: Land	$ 1,836,200	$ 12,655,400	$ 14,491,600	18.47%
II. Direct Construction				
General Conditions	$ 207,900	$ 1,244,760	$ 1,452,660	1.85%
Off-site Improvements	$ 119,500	$ 855,500	$ 975,000	1.24%
On-site Improvements	$ 160,500	$ 869,500	$ 1,030,000	1.31%
BMPs	$ 43,000	$ 297,000	$ 340,000	0.43%
Asbestos Removal/Disposal	$ 242,820		$ 242,820	0.31%
Building Construction	$ 2,250,000	$ 29,256,000	$ 31,506,000	40.15%
Tenant Improvements	$ 600,000	$ -	$ 600,000	0.76%
LEED Construction	$ 102,195	$ 982,199	$ 1,084,394	1.38%
Contingency (10%)	$ 350,871	$ 3,372,217	$ 3,723,087	4.74%
Contractor Fee	$ 173,681	$ 1,669,247	$ 1,842,928	2.35%
OCIP	$ 80,665	$ 775,273	$ 855,938	1.09%
Bonds	$ 40,333	$ 387,636	$ 427,969	0.55%
Total: Direct Construction	$ 4,371,465	$ 39,709,332	$ 44,080,797	56.17%
III. Indirect				
Predevelopment	$ 249,256	$ 2,395,592	$ 2,644,848	3.37%
Architecture & Engineering	$ 290,798	$ 2,794,858	$ 3,085,656	3.93%
LEED Design & Commissioning	$ 29,080	$ 279,486	$ 308,566	0.39%
Fees & Permits	$ 300,000	$ 2,544,000	$ 2,844,000	3.62%
Purchase of ERU's not with Land	$ -	$ 630,000		0.00%
Purchase of TAU's not already owned	$ -	$ -		0.00%
Taxes, Legal & Insurance	$ 124,628	$ 1,197,796	$ 1,322,424	1.69%
Marketing	$ 166,170	$ 1,597,062	$ 1,763,232	2.25%
FF&E Procurement	$ -	$ 900,000	$ 900,000	1.15%
Interior Design	$ -	$ 381,600	$ 381,600	0.49%
Leasing Commissions	$ 75,000	$ -	$ 75,000	0.10%
Contingency (5%)	$ 61,747	$ 636,020	$ 697,766	0.89%
Total: Indirect	$ 1,296,678	$ 13,356,413	$ 14,653,091	18.67%
IV. Financing				
Construction Loan Fees	$ 109,307	$ 989,075	$ 1,098,382	1.40%
Interest during Construction	$ 185,000	$ 1,498,469	$ 1,683,469	2.15%
Interest during Sales (Residential)		$ 2,467,654	$ 2,467,654	3.14%
Total: Financing	$ 294,307	$ 4,955,198	$ 5,249,505	6.69%
TOTAL				
With Land	$ 7,798,651	$ 70,676,343	$ 78,474,993	
Per SF	$ 487	$ 435	$ 428	
Without Land	$ 5,962,451	$ 58,020,943	$ 63,983,393	
Per SF	$ 338	$ 328	$ 312	

Note: Estimated development cost does not include: 1) public infrastructure and utility upgrades; 2) site remediation

Table 3:
Estimated Retail Lease Space Income

		Area (SF)	Monthly Rent	Annual Rent	Annual Income
I. Rental Income					
Retail		15,000	$ 3.25	$ 39.00	$ 585,000
Office		0	$ 2.75	$ 33.00	$ -
Total:		15,000			$ 585,000
Less: Vacancy (5%)	5%				$ (29,250)
Tenant Reimbursements			$ 0.40	$ 4.80	$ 72,000
Effective Gross Income					$ 627,750
II. Operating Expenses					
Management					
Maintenance					
Taxes					
Insurance					
Re-leasing					
Reserves					
Total:				$ 3.00	$ (45,000)
III. Net Operating Income					$ 582,750

Development Cost Assumptions

I. Land

Acquisition	$	32.00	per SF of existing land area (assumed 20% less than 3/07 prices)
Demolition	$	10.00	per SF of building area
Site Preparation	$	5.00	per SF of site area

II. Direct Construction

General Conditions	$	11.00	per SF of site area
Off Site Improvements	$	250.00	per LF of public street frontage
On Site Improvements	$	12.00	per SF of site area
BMP	$	10.00	per SF; no cost included for ongoing operation and maintenance
Asbestos Abatement	$	3.00	per SF of demolished buildings
Building Construction	$	150.00	per SF for Retail $ 230.00 per SF for Residential
Tenant Improvements	$	40.00	per SF of leasable area
LEED Construction		3%	of Direct Construction Cost (no GC Fee, Bonds or CCIP included)
Bonds		1%	of Building Construction Cost
OCIP		2%	of Building Construction Cost
Contractor Fee		4.5%	of Building Construction Cost
Contingency		10%	of Direct Construction Cost (Hard Cost only)

III. Indirect

Predevelopment		6%	of Direct Construction Cost
Architecture & Engineering		7%	of Direct Construction Cost
LEED Design & Commissioning		10%	of Architecture/Engineering Costs
Fees & Permits	$	20.00	per SF of building area
Purchase of ERU's	$	45,000.00	per ERU needed to be purchased on open market
Purchase of TAU's	$	65,000.00	per TAU needed to be purchased on open market
Taxes, Legal, & Insurance		3%	of Direct Construction Cost
Marketing		4%	of Direct Construction Cost (Large project size would rec
FF&E Procurement	$	20,000.00	$ 32,500.00 $ 45,000.00 per 800, 1200, and 1600 sq. ft unit
Interior Design Fee	$	3.00	per SF of Residential Space
Leasing Commissions	$	5.00	per SF of leasable area (retail commercial)
Contingency		5%	of indirect costs

IV. Financing

Loan Fees	1.50%	of estimated construction loan amount including an additional 1% for permanent loan financing
Interest During Construction	7.50%	interest rate, 25yr term, 70% loan-to-cost ratio, 12 month construction period
Interest During Sales		50% pre-sales; 30 month absorption for completion of sales

Notes:

1. Estimated total development costs do not include: a) public infrastructure and utility upgrades; 2) site remediation

Table 4:
Estimated Townhome (Condominium) Unit Sale Proceeds

	Units	Unit Size (SF)	Price Per SF	Sale Price	Sale Proceeds
I. Sale Proceeds					
Townhouses	40	800	$ 560	$ 448,000	$ 17,920,000
	22	1,200	$ 510	$ 612,000	$ 13,464,000
	22	1,600	$ 475	$ 760,000	$ 16,720,000
Total:	84				$ 48,104,000
Less: Cost of Sales/Closing (3%)	6%				$ (2,886,240)
II. Net Sale Proceeds					$ 45,217,760

Table 5:
Estimated Townhomes Fractional Ownership Unit Sale Proceeds

	Units	Fractional Units (1)	Unit Size (SF)	Price Per SF	Sale Price	Sale Proceeds
I. Sale Proceeds						
Fractional Ownership Units	12	48	800	$ 170	$ 136,000	$ 6,528,000
	12	48	1,200	$ 160	$ 192,000	$ 9,216,000
Total:	6	24	1,600	$ 150	$ 240,000	$ 5,760,000
	30	120				$ 21,504,000
Less: Cost of Sales/Closing (6%)	12%					$ (2,580,480)
II. Net Sale Proceeds						$ 18,923,520

Footnotes:
(1) Based on each unit being sold for 13-week intervals

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Table 6:
Estimated Project Value

I. Retail/Office				
Annual Net Operating Income (see Table 3)	$	990,000	$	582,750
Project Value (8.0% capitalization rate)	$	12,375,000	$	7,284,375
Less: Development Cost (see Table 2)	$	15,260,775	$	7,798,651
Net Project Value	$	(2,885,775)	$	(514,276)
II. Townhomes (Condominiums)				
Net Sale Proceeds (see Table 4)	$	37,637,600	$	45,217,760
Project Value	$	37,637,600	$	45,217,760
Less: Development Cost (see Table 2A)	$	43,523,362	$	50,577,471
Net Project Value	$	(5,885,762)	$	(5,359,711)
III. Townhomes (Fractional Ownership)				
Net Sale Proceeds (see Table 5)	$	18,923,520	$	18,923,520
Project Value	$	18,923,520	$	18,923,520
Less: Development Cost (see Table 2A)	$	20,144,281	$	20,316,078
Net Project Value	$	(1,220,761)	$	(1,392,558)
IV. Townhome Property Management/Rental				
Net Project Value	$	2,318,663	$	2,951,025
V. Summary				
Retail	$	(2,885,775)	$	(514,276)
Townhomes (Condominiums)	$	(5,885,762)	$	(5,359,711)
Townhomes (Fractional Ownership)	$	(1,220,761)	$	(1,392,558)
Townhomes (Condominiums) Property Mgt/Rental	$	2,318,663	$	2,951,025
Total	**$**	**(7,673,636)**	**$**	**(4,315,519)**
VI. Value of Unused Site Coverage				
Unused Site Coverage (1)		85,068 SF		85,068 SF
Value of Unused Site Coverage (2)	**$**	**552,900**	**$**	**552,900**
VII. Value of Surplus TAU's/ERU's (if applicable)				
Surplus TAU's/ERU's	**$**	**-**	**$**	**-**
Potential Net Project Value: Margin on Cost (%)		**-9.02%**		**-4.78%**
Potential Net Project Value: Net CF ($)	**$**	**(7,120,736)**	**$**	**(3,762,619)**
Project Percentage "Gap" to 20% Developer Hurdle Rate		**29.02%**		**24.78%**
Project Dollar "Gap" to 20% Developer Hurdle Rate	**$**	**22,906,419**	**$**	**19,501,059**

Footnotes:
(1) Based on the difference between existing site coverage (71.0%) and proposed project site coverage (43.2%)
(2) Based on $6.50 per square foot (Market Value of Land Coverage in Lake Tahoe Basin, Johnson-Perkins and Associates, Inc., January 26, 2006)

SOUTH LAKE TAHOE CASE STUDY

Value of Rental Program and Property Management ($000s)

	Net Present Value	Discount Rate	CY 2,010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
Value of Rental Program and Property Management									
Projected Absorption — Units									
Units Closing — 84			84	-	-	-	-	-	-
Cumulative Units Closed			84	84	84	84	84	84	84
Percent in Rental Program			50%	50%	50%	50%	50%	50%	50%
Units in Rental Program			42	42	42	42	42	42	42
Occupancy Rate			35%	35%	35%	35%	35%	35%	35%
Average Daily Rate			$350	$350	$350	$350	$350	$350	$350
Occupied Unit Nights			5,366	5,366	5,366	5,366	5,366	5,366	5,366
Gross Rental Revenue			$ 1,877,925	$ 1,877,925	$ 1,877,925	$ 1,877,925	$ 1,877,925	$ 1,877,925	$ 1,877,925
Rental Management Revenue @ 50%			$ 938,963	$ 938,963	$ 938,963	$ 938,963	$ 938,963	$ 938,963	$ 938,963
Less: Operating Expense @ $120 per Occupied Unit Night			(643,860)	(643,860)	(643,860)	(643,860)	(643,860)	(643,860)	(643,860)
Net Management Contribution			$ 295,103	$ 295,103	$ 295,103	$ 295,103	$ 295,103	$ 295,103	$ 295,103
Terminal Value (10x 2014)									2,951,025
Total Value of Incremental Contribution			**$ 295,103**	**$ 295,103**	**$ 295,103**	**$ 295,103**	**$ 295,103**	**$ 295,103**	**$ 3,246,128**
Net Present Value of Incremental Contribution	**$ 2,951,025**	**10.0%**					**Total Capitalized Operating Income & Terminal Value**		**$ 5,016,743**
Present Value Calculation/Year:			*$ 268,275*	*$ 243,886*	*$ 221,715*	*$ 201,559*	*$ 183,235*	*$ 166,578*	*$ 1,665,777*

Notes:

CAVEATS AND LIMITATIONS

1. The preliminary analysis contained in this document is based, in part, on data and information from secondary sources. A. Plescia & Co. believes that these sources are reliable; however, A. Plescia & Co. cannot guarantee the accuracy of such data and information.

2. The preliminary analysis assumes that neither the local, regional or national economy will experience a major recession. If an unforeseen change occurs in either the local, regional or national economy the information contained in this document might not be valid.

3. The information contained in this preliminary analysis is based on economic considerations, not political considerations. Therefore the preliminary information should not be construed as a representation or opinion that any required governmental approvals would be secured for any proposed development projects.

4. The preliminary information and analysis is based on informed judgment using the best available market, business and economic data and information that reflects current real estate market conditions as of the date of this preliminary analysis. The preliminary information and analysis should not be relied upon as sole input and basis for any final business decisions regarding any proposed development projects.

5. Any preliminary estimated land values, construction costs, financing costs, lease rates, sales income projections, etc. are based on the best available data and information as of the date of this preliminary analysis. No warranty or representation either expressed or otherwise, is made that these estimates would actually materialize.

IX. SUPPLEMENTAL SUGGESTION: A TAHOE ECODISTRICT APPROACH

A Tahoe EcoDistrict Approach: Implementing TMDL and Creating Energy Efficient, High Performing Neighborhoods

Introduction

EcoDistricts are distinct neighborhoods that are highly energy and resource efficient. They capture, manage, and reuse a majority of energy, water, and waste on site; they enhance human health and wellbeing. The EcoDistrict approach provides a comprehensive framework for project planning, implementation, and management for both environmental and community improvement.

By reinvesting in high priority redevelopment areas and TMDL hotspots with district and neighborhood scale coordination and design, there is an opportunity to further reduce fine sediment and improve the clarity of Lake Tahoe. EcoDistricts will help achieve the Tahoe Region's greenhouse gas emissions reduction target (per SB 375), meet our water clarity/environmental goals and Thresholds, and reposition the region as a leader in sustainable development.

Lake Tahoe Community College leaders are already seeking funding to address district and renewable energy solutions at a district scale.

EcoDistricts Explained

The EcoDistrict approach will help the Tahoe Basin increase its livability and prosperity, reach its water quality and lake clarity Thresholds, reduce its ecological footprint, and improve human and ecological health. EcoDistricts are focused around four core areas: buildings and infrastructure, water quality, transportation, and community connectivity.

The Approach can be applied to:

- **New Redevelopment & Infill:** Projects are master planned to exceed current standards and performance metrics (building on the Community Enhancement Program (CEP) and special projects programs)

- **Existing Neighborhoods:** Strategic investment in existing neighborhoods, districts, and streets to improve their overall performance.

Creating a More Sustainable Built Environment in Tahoe with Environmental Benefits

This proactive approach builds on the lessons learned from the CEP and the challenge of implementation on a project scale.

These high performing neighborhoods also utilize innovative concepts such as green streets combined with district energy solutions. The built environment -- buildings, roads, infrastructure, and public spaces -- plays a significant role in a region's ability to meet long-term sustainability goals.

At Tahoe, the concept of thinking at a district scale is not new and has been successful in creating stormwater management solutions for a variety of neighborhoods and community plan areas. The Lake Tahoe Environmental Improvement Program (EIP) also requires both regional thinking and district solutions to get effective projects on the ground. By adding green infrastructure and district/renewable energy solutions to the mix, Tahoe can move toward integrated sustainability planning and implementation that combines and addresses the highest standards required by the Tahoe Regional Planning Compact and adopted Thresholds, along with more recent legislative direction regarding the need for global warming solutions, including greenhouse gas reduction targets, and sustainable community strategies (e.g., California AB 32 and S.B. 375).

In model sustainable neighborhoods like Bed Zed in England; Bo01 in Malmo, Sweden; Dockside in Victoria, BC; the Olympic Village in Whistler, BC; the Railyard Project in Truckee, CA; and the Cohousing Project in Nevada City, CA, a new generation of integrated planning, public policy, and investment strategies are being tested. In these examples, the communities have supported public and private partnerships to exceed "business as usual" strategies and in doing so, they have found measurable improvements in water quality, per capita utility costs, greenhouse gas emissions, vehicle miles traveled, transportation mode splits, stormwater quality, and social wellbeing.

The proposed Tahoe EcoDistrict Program would be inspired by these next generation green neighborhoods and would build on the Region's existing efforts to enable and implement stormwater districts, sustainable mobility, green building, climate protection, energy efficiency, and green job creation. This integrated, comprehensive approach is more cost effective and may be facilitated by many existing programs in the Basin; as listed elsewhere in this report.

EcoDistrict Objectives

- Creates a regional scale ecological footprint and district level performance metrics
- Supports the integration of building and district scale physical and social infrastructure
- Encourages new regional policies and investments in district resource management
- Creates robust local governance to guide environmental performance and district scale investments
- Stimulates district infrastructure investment through new utility relationships
- Enables neighborhood-scale business investment in green and clean technologies
- Promotes aggregation of community ecosystem services
- Promotes livable, healthy and environmentally friendly neighborhoods
- Creates receiving areas for TDRs
- Works across multiple properties with multiple ownership

Outcomes

- Water quality improvements in designated TMDL hotspots
- Redevelopment that results in environmental regeneration through integrated solutions
- Economic efficiencies from coordinating distributed infrastructure investments
- Integrated systems that achieve exceptional environmental performance
- Designed for resource capture (e.g. solar, water), maximum efficiency and resource reuse

EcoDistricts can provide even greater overall improvements to water quality and lake clarity and reduce fine sediment and nutrient loads. First and foremost, they are models of efficient water capture, use, and reuse. Water catchment and greywater systems may be built into the district's infrastructure. Landscaping may be designed to mimic pre-development ecosystem services and allow for optimal infiltration and groundwater recharge. Stormwater runoff is treated to the highest levels.

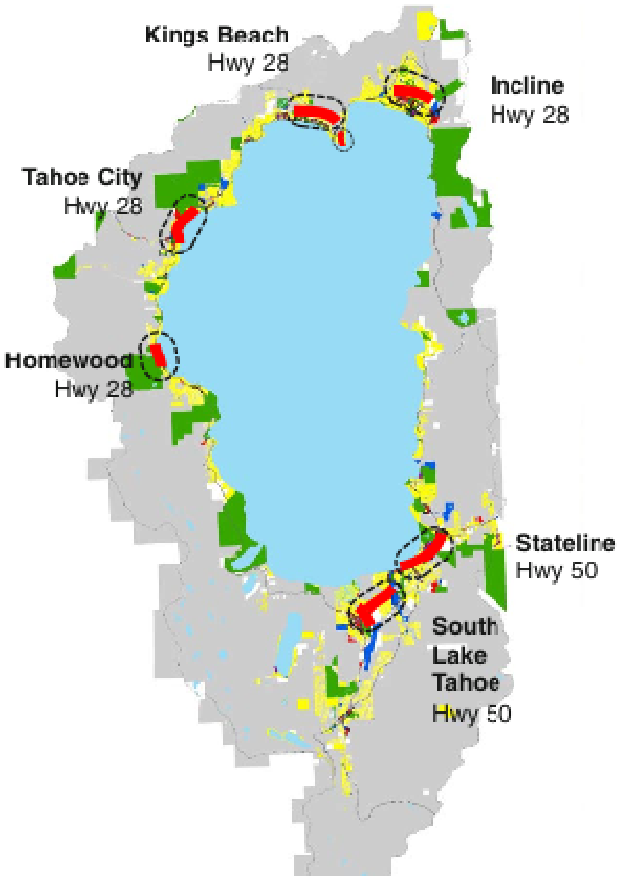
The proposed Tahoe EcoDistrict Program will serve as an economic development strategy. The Program will spur the development of a green services industry in the region, while stimulating local business and fostering unique public-private investment and partnerships for implementation. It will involve working collaboratively to utilize new innovations in renewable energy, district solutions, community design, water quality, restoration, and redevelopment.

This is a proactive approach that involves working together in a collaborative fashion to utilize new innovations in renewable energy, district solutions, community design, water quality, restoration and redevelopment.

The approach described herein by Darin Dinsmore of Sustainable Community Strategies has been developed to assist communities in California with sustainability implementation consistent with the goals of the Strategic Growth Council and the State Office of Planning and Research. Mr. Dinsmore is currently teaching this approach at three Universities, national conferences, the USGCB Federal Forum and for California Office of Planning and Research (OPR) and Strategic Growth Council staff (SGC).

Redevelopment for both community and environmental improvement should work to implement the Regional Plan goals as outlined below, specifically: priority redevelopment in TMDL hotspots, and the implementation of urban environmental improvements with sustainably designed communities, places and buildings.

Redevelop Existing Communities



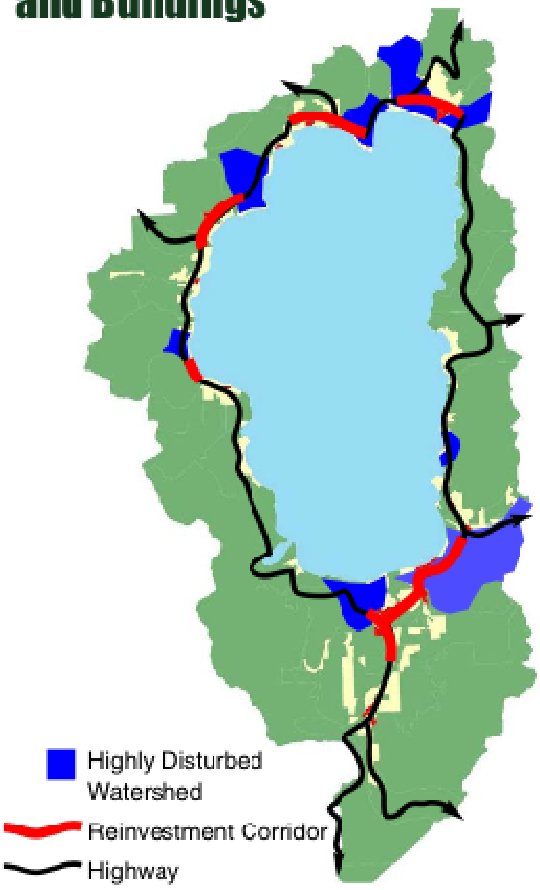
Concept

Redeveloping our urbanized areas with compact, walkable, transit-oriented communities and green buildings will help to reduce GHG emissions and accelerate attainment of environmental thresholds. The land-use direction outlined in the Regional Vision document, draft Regional Plan policies, and the Regional Transportation Plan are consistent with ICLE principles for addressing climate change. By developing complete communities and neighborhoods, residents are offered the opportunity to work, live, play, shop and learn within a convenient walking or transit distance. Efficient land-use planning will reduce energy, water use and vehicle miles traveled (VMT). Regional Vision principles and draft Regional Plan policies will be focused on creating walkable, mixed-use centers, compact neighborhoods, and enhanced gateways and places. The promotion of infill and reinvestment is necessary in order to increase density and compact development within walking distance of transit stops.

Actions

- Reconfigure land-use patterns to create walkable, mixed-use centers and compact appropriately-scaled redevelopment
- Redevelop up to nine centers with improved pedestrian and transit-oriented urban design that reduces dependency on the automobile
- Design for improved connectivity, walkability, and mobility options between centers to reduce automobile dependancy
- Provide affordable housing solutions and a work/housing balance that reduces the need for commuting
- Create live/work and work/live opportunities with flexible buildings and mixed-use zoning that allows local businesses to grow and evolve over time

Sustainably Designed Communities, Places, and Buildings



Concept

Thoughtful site design and area-wide planning and design may result in coverage reductions while supporting more walkable and compact development. Sustainable site planning and design should also incorporate improved solar orientation, energy efficiency and design and introduction of new efficient building types. New buildings are long-term investments and should feature quality design/materials, flexible design to deal with changing demands and be built green. Energy use in existing buildings and new building construction generally contributes over 30% to the regional GHG emissions. Many of the residential units are also heated when they are only occupied seasonally or a small percentage of the year.

Actions

- Promote efficient use of land and redevelopment/infill with compact development in existing community plan areas and nodes
- Develop a green building strategy with local partners to encourage redevelopment, compact neighborhoods, mixed-use centers and address energy efficiency, solar design, indoor air quality, green roofs, water efficient fixtures, etc.

Work with local county and city municipalities to:

- Improve design review and ask for specific site design performance measures including studies to demonstrate solar orientation and passive design elements
- Become green building leaders and incorporate energy efficiency in public buildings and facilities
- Promote energy-efficient attached buildings in town centers and nodes
- Provide clear incentives for green buildings and consider phasing in the green rating system or LEED certification
- Create a Tahoe Specific Green Building program focusing on key points of certification important to the region

Urban Environmental Improvements

Concept

Comprehensive "green" infrastructure strategies are important when addressing sustainability objectives in the supply and management of energy, solid waste and materials, water and waste water. Local municipalities may want to follow the lead of the City of South Lake Tahoe to: "Develop a recycling action plan to achieve a 55% diversion rate by 2011. By requiring recycling containers in all city buildings the City will lead by example; Recycle and conserve." and to: "Investigate and discuss with the business community by June 2009 and return to City Council with a program designed to reduce the use of plastic bags and Styrofoam in the City of South Lake Tahoe."

Actions

- Work with local agencies to improve solid waste reduction and recycling
- Increase economic efficiency and performance by reducing the consumption of non-renewable resources
- Promote reduction, re-use and recycling
- Divert solid waste from the landfill including household, commercial, construction and site/forest clearing waste
- Implement recycled content and green procurement policies
- Work with local agencies to improve water and waste water reduction
- Use water more efficiently in our homes, businesses and landscapes, and manage runoff that maintains natural hydrological regimes
- Develop an innovative water and waste water management strategy that considers water supply and treatment systems
- Reduce demand for potable water through water recycling and reuse of treated water