Clear Creek Transit Village

Vision Plan

May 2009
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The TOD Group, manager of the Denver Transit Oriented Development Fund, LLC, purchased 6001 Federal Blvd. in February 2009 with the vision of creating a world class Transit Oriented Development (TOD) to become known as the “Clear Creek Transit Village”.

The TOD Group strives to ensure that the Clear Creek Transit Village becomes a national example of best practice in TOD and sustainable development. Our mission as the landowner and master developer is to work with Adams County, RTD, and the community to create a vibrant community surrounding the Federal Blvd. train station along the Gold Line corridor.

The TOD Group’s Clear Creek Transit Village Vision Plan builds upon the Adams County Clear Creek Valley TOD Plan prepared by RNL Design in June 2008.

The vision document for the Clear Creek Transit Village includes:

1. A summary of best practice in Transit Oriented Development including a discussion of benefits

2. Best practice in TOD applied to the Clear Creek Transit Village within the overall Clear Creek Valley TOD Plan study area

3. Conceptual site plan, massing and design views for the Clear Creek Transit Village

This Vision Plan includes short descriptions of other model TODs from across the world, which we believe are good examples for the Clear Creek Transit Village.

**Vision Overview**

_Malmö, Sweden_

The TOD in Malmö is an inspiration for the Clear Creek Transit Village because of its commitment to sustainability, including pedestrian and bicycle infrastructure and carbon minimizing building design.

The city transformed an old industrial area known as the Western Harbor into an urban residential neighborhood focusing on walking, biking, and access to the train station. The high-quality mixed use design reduces the need for using a car. Automobile parking has been significantly limited and replaced with ample parking for bicycles and high quality public space for pedestrians. By limiting space for automobiles, the City of Malmö intends to create an additional 30,000 residential units and commercial space to accommodate 20,000 office workers within the walkable catchment of the train station by 2020.
Transit Oriented Development Overview

Transit Oriented Development (TOD) is gaining popularity across America as one of the most promising forms of real estate development as it represents an option for a sustainable lifestyle.

*Emerging Trends in Real Estate* (2008), published by Urban Land Institute and PricewaterhouseCoopers reported that while real estate markets face risk within the context of a slowing national economy, TOD remains a solid investment. They believe TOD will be “Phenomenal Over the Next Decade … [as] congestion mounts everywhere and people get sick of losing time in traffic jams and car-dependent lifestyles. Higher gas prices, global warming issues, and pollution just add to frustration levels. Condominiums, apartments, and retail near light- rail or subway/train stops become ‘increasingly attractive’” (p. 15).

Another report by the Urban Land Institute, *Developing Around Transit* (Dunphy et al. 2004) recommend 10 principles for TOD. These principles, which were highlighted in the *Clear Creek Valley TOD Plan*, are:

1. Make it better with a vision
2. Apply the power of partnerships
3. Think development when thinking about transit
4. Get the parking right
5. Build a place, not a project
6. Make retail development market driven, not transit driven
7. Mix uses, but not necessarily in the same place
8. Make buses a great idea
9. Encourage every price point to live around transit
10. Engage corporate attention

The Brookings Institution and the Transit Cooperative Research Program, recently released reports that acknowledged the difference between ‘transit-oriented development’ (TOD) and ‘transit-adjacent development’ (TAD). A TAD is “development that is physically near transit [but] fails to capitalize upon this proximity… [it] lacks any functional connectiv-

ity to transit – whether in terms of land-use composition, means of station access, or site design.” A TOD must seek to provide mixed uses in a compact, walkable environment with convenient access to the station.

A study for the Transit Cooperative Research Program (TCRP) by Cervero, Ferrell and Murphy (2002) synthesized many sources to show the common elements of many definitions: A TOD is usually mixed-use, close to and well-served by transit, and conducive to transit riding. TOD is more than just about transit, it’s also about walking and bicycling.

The *New Transit Town* (2004) by Dittmar and Ohland proposed a performance-based definition of TOD, which should meet five main goals:

1. Location efficiency - comprises density, transit accessibility and pedestrian friendliness.
2. A rich mix of choices - refers to people’s ability to have not only transport alternatives but also choice in housing, retail and employment.
3. Value capture - refers to people’s ability to have not only transport alternatives but also choice in housing, retail and employment.
4. Placemaking - the ability for TOD to create attractive, pedestrian-friendly neighborhoods replete with high-quality civic spaces, similar to many European cities.
5. Resolution of the tension between node and place - the dual role of a train station to serve as a node within a regional transportation network as well as a place in a neighborhood.
Benefits of Transit Oriented Development

TOD yields benefits for various stakeholders in the context of economic development, environmental stewardship and travel behavior.

In *Transit Oriented Development: Making It Happen* (Curtis, Renne, and Bertolini, forthcoming 2009) the measure of success of TOD varies by stakeholder interests, which include the community, local government, transit agencies, state and regional agencies, and private investors and developers. Each stakeholder group has different needs that must be considered.

Creating a successful TOD requires a partnership between the developer, the community, and the local government. Studies show significant benefits when done correctly. Cervero and Arrington (2008) conducted a national study of travel behavior in TODs, which found that TODs generated 44 percent fewer vehicle trips than similar developments not located in a TOD.

Other studies by Cervero reveal that lower parking requirements combined with higher density generate a greater probability that people will choose to use transit. Moreover, the relationship is not linear. Developments at 30 units per acre yield approximately 30 percent of commute trips by transit, however developments greater than 75 units per acre yield over three-quarters of commuters choosing transit.

Vehicle ownership studies of TOD households found the following:

- TOD households own an average of 0.9 cars compared to 1.6 cars for comparable households not living in TODs
- TOD households are almost twice as likely to not own a car (18.5% versus 10.7%)
- While about 66% of non-TOD households own 2 or more vehicles, only about 40% of TOD households own as many cars
- In TODs, about 63% of households own fewer than two cars, compared to 45% for other households

*Fruitvale Transit Village, Oakland, California*

The Fruitvale Transit Village is an example of compact, mixed use, pedestrian-friendly TOD at the Fruitvale BART train station. This project was the result of a successful partnership between public and private entities. The project has 35 units per acre in residential density and includes 149,000 s.f. of office and community space and 39,000 s.f. of retail space in a formerly blighted area.

San Francisco Chronicle reported, *It takes vision to build a transit village. It also takes a lot of public and private money and an unrelenting push from community leaders who were determined to turn commuter parking lots into a hub of revitalization for their neighborhood. Such is the case with the Fruitvale Transit Village, a colorful explosion of affordable housing, retail shops and more sitting on land that surrounds BART’s Fruitvale station in Oakland, once a dingy and dangerous spot in a neighborhood short of jobs and housing (San Francisco Chronicle 2004, p E4).*

Note: This photo was taken from the BART station platform. The development includes a mix of public and private uses, including residential, retail, office, community facilities such daycare and a senior center.
TODs also yields a number of other sustainability benefits:

Economic Benefits
- The Great American Station Foundation documented that station area development yields increased employment, household income, and tax revenue for local governments
- Denver Post (October 29, 2008) cited a study which determined that homes within ½ mile of RTD’s light rail stations have appreciated by an average of 17.6 percent over the past two years as compared to a regional market decline of 7.5 percent
- Another study reported by the Denver Post (November 5, 2009) found that office space located near RTD’s light rail stations was fully leased whereas office space not located in a TOD had much higher vacancy rates

Environmental and Community Benefits
According to nonprofit Reconnecting America, TODs result in:
- More efficient use of land, energy and resources
- Conservation of open space
- Less oil and gas consumption
- Cleaner air
- Minimization of increased traffic congestion
- More walking
- Healthier lifestyles
- Neighborhoods are safer because there are more people on the street and more “eyes on the street”

Addison Circle, Texas
Addison Circle is located in the low-density, sprawling suburbs of Dallas, Texas. This walkable oasis was designed as a TOD well before the arrival of the train station at 75 units per acre (1,334 apartments), 110,00 s.f. of retail, 40,000 s.f. of office, and 20,000 s.f. of storage space. The urban design facilitates walking and biking through density and a mixed use urban form.

Commonly described as “European-like” Addison is a great example of placemaking as the project includes cafes and restaurants, convenience retail, office space, condos, and other residential with a mix of pocket parks and plazas. The project has been so successful that the development has become a destination for business meetings as well as tourists.
Clear Creek Valley - Federal and Pecos RTD Stations

Adams County Clear Creek Valley TOD Plan
The Adams County Clear Creek Valley TOD Plan envisions future development opportunities arising from the new Pecos and Federal Blvd. RTD train stations. The plan states:

Adams County initiated this study to plan for potential new development that may evolve around the two transit stations planned for Southwest Adams County – the Clear Creek at Federal station on the Gold Line and the Pecos Junction station that potentially will serve as a transfer station between the Gold and the Northwest commuter rail lines.

The following station area goals became the focal point for the study -

• Maintain and enhance existing commercial corridors
• Create new connections with surrounding residential and commercial areas
• Revitalize older commercial and industrial areas
• Encourage mixed use development
• Promote sustainable development
• Enhance the area’s role as a gateway to Southwest Adams County
• Maintain and enhance existing residential neighborhoods
• Improve open space and recreational opportunities
• Revitalize vacant and under utilized land

Goal – Clear Creek at Federal Station

The vision for the Clear Creek at Federal Station is to create a new, vibrant, transit-oriented community amenity within walking distance of the transit station. New retail, employment, entertainment and living opportunities within the new Village Center will serve the needs of the existing community, and maintain the area as an employment center for Adams County (pp.2 -3).
Clear Creek Transit Village Goals

The regulations necessary to create a successful TOD at the Clear Creek Transit Village have already been implemented across the Denver Metro area. Examples of successful mixed use developments include: Central Platte Valley, Belmar, Stapleton, and the Villagio at Inverness. The Clear Creek Transit Village will borrow tenets from these and other successful developments. Some of the goals for the Clear Creek Transit Village include:

Goals

- Maximizing access to the RTD rail station
- Creating a critical mass of residents, employees, and shoppers to have a thriving retail environment and well-used public spaces
- Building Class A office space with a focus on creative and sustainable industries
- Maximizing opportunities for people to access nature without getting in a car
- Creating a substantially smaller carbon footprint as compared to conventional development through sustainable transport patterns and building design and use
- Creating LEED rated buildings
- Establishing car sharing and bicycle sharing to reduce the need for vehicle ownership
- Encouraging festivals, music, and other cultural activity on-site

Wild Colorado Five Minutes from Downtown Denver

The Clear Creek Transit Village will attract residents not just because of the high quality village and five minute train ride to Downtown Denver, but because it offers access to natural and cultural amenities. The amenities include:

- Views of Lake Sangreco on the western and northern boundaries with the Rocky Mountain backdrop
- Fishing, tubing and kayaking on Clear Creek located on the Southern boundary
- Immediate access to biking, running, rollerblading and walking through a regional network of multi-use paths
- Bird watching
- A five minute walk to the Jim Baker Reservoir
- The ability to connect via rail to the ski train to Winter Park without ever getting into a car or bus
- Access to Denver International Airport by rail
- Connections to every major employment cluster via rail, including Downtown Denver, Denver Tech Center, Boulder, Golden, Interlocken and the Medical Center
Planning, Design, and Station Location

Density, Design, and Land Use Mix
Creating a successful TOD necessitates a close look at details, such as density, quality of building design, and the mix of land uses. Market forces drive the demand for office and retail space, condos, townhouses, and apartments. Successful TODs around the United States apply the following principles:

• Minimum gross residential density of 25 units per acre
• Design standards for urban form characteristics - TODs should include high quality building design
• A form-based code to allow for a mix of desirable land uses, including retail, office, and residential as well as recreational activities
• Maximum parking requirements to encourage space for people rather than cars. As noted earlier, vehicle use and ownership in TODs is significantly lower than conventional developments

The TOD Group and Van Meter Williams Pollack propose the following principles to guide the Clear Creek Transit Village:

• Minimum gross residential density of 25 units per acre; maximum gross residential density of 75 units per acre
• Minimum commercial floor area ratio (FAR) of 0.15; maximum commercial FAR of 0.5
• Minimum Total FAR 0.75; Maximum Total FAR of 3.0
• No Minimum Parking (does not include RTD requirements for commuter parking; Maximum parking at 1 space per bedroom unit with 2 spaces maximum for residential; 2 spaces per 1,000 s.f. of office space; 3 spaces per 1,000 s.f. for retail space.
• 7 story maximum height or 95 feet
• Accessible and integrates with rail station, bus interchange, taxi, and kiss and ride
• Bicycle parking
• Pedestrian-friendly and transit-oriented design

Location of RTD Train Station
Current plans call for the Federal Blvd. train station to be located on the east side of Federal Blvd. This decision was made in part to ensure that 6001 Federal Blvd. remain available for TOD, particularly because the site is optimal for residential, unlike much of the property on the east side of Federal Blvd. due to land contamination issues associated with the flammable gas overlay district. Adams County did not want to see a large portion of 6001 Federal Blvd. used as a surface parking lot for commuter parking. Our design includes an on-site parking structure, which accommodates commuter parking. It is anticipated that a public-private partnership will be needed to finance the parking structure.

Our conceptual design locates the Federal Blvd. train station on the west side, which is the ideal location to maximize the opportunity for TOD and transit ridership. The site plan includes not only parking spaces to accommodate RTD’s commuter parking, but also a bus interchange and kiss and ride facilities.

Locating the station on the west side will significantly increase ridership. Our model estimates an additional 376 to 2,776 walk up riders per day based on our proposed range of possible residential densities. We estimate 614 additional walk up riders per day based on the site concept shown in this plan. Proposed densities and walk up ridership estimates are based on research of TODs across the United States. While the creation of a successful development is not contingent upon the ultimate location of the station, we estimate that walk up ridership will be reduced by 50 percent or more if the station is built on the east side of Federal.

Our plan also depicts alternative locations for the train station on the east side and directly above Federal Blvd. We recognize that moving the station to the west requires a process outlined by RTD after the Record of Decision of the Gold Line Environmental Impact Statement. We believe that it would be in the best interest for the future residents of the Clear Creek Transit Village to explore this option.
Concept Design
Concept Design Massing

WEST / MAIN STREET VIEW

NORTHWEST VIEW

SOUTHEAST VIEW

EAST / MAIN STREET VIEW

6001 FEDERAL BLVD. | CONCEPT DESIGN MASSING
ADAMS COUNTY, CO | MARCH 27, 2009 | THE TOD GROUP
Conceptual Design Views

OVERALL SITE MASSING LOOKING NORTHWEST

VIEW FROM FEDERAL BLVD LOOKING NORTHWEST

VIEW FROM ALOHA BEACH DRIVE LOOKING SOUTHEAST

VIEW FROM ALOHA BEACH LOOKING SOUTHEAST

6001 FEDERAL BLVD. | CONCEPT DESIGN VIEWS
ADAMS COUNTY, CO | MARCH 27, 2009 | THE TOD GROUP
Important Issues and Conclusion

Important Issues
To achieve this vision several important issues must be addressed. These include:

- **Floodplain Mitigation** - a portion of the Clear Creek Transit Village and the majority of the Clear Creek Valley TOD site on the east side of Federal Blvd. area lies within a 100-year flood plain. Property owners in the affected area need to work with Adams County and other governmental agencies to develop a solution to this problem.

- **Land Contamination** - even though the Clear Creek Transit Village does not have contamination issues, properties on the east side of Federal Blvd. may. Property owners need to work with Adams County and other governmental agencies to clean up properties for redevelopment into a higher and better use.

- **Community Outreach** - the planning process will include dialogue and input from the surrounding community, including stakeholders such as nearby landowners, residents, and business owners.

- **Market for Development** - the development vision for the Clear Creek Transit Village is long-term. Given the current economic recession and the opening of the Gold Line in 2016 we expect little to no new development opportunities within the next 12 - 24 months. The entire build out will most likely occur in 2 - 4 phases as dictated by market conditions. Our target market will include a range of price points with a focus on professionals and working class individuals. We believe that this site will attract many young professionals who will choose this location as an alternative to LoDo because of access to nature and price points that will allow for housing market entry approximately 25 - 40 percent less expensive than housing in LoDo. We are also open to the inclusion of workforce housing based on input from the community and Adams County.

- **Fiscal Impact** - the development of the Clear Creek Transit Village will encourage landowners and developers to invest in surrounding properties including land on the east side of Federal Blvd. The *Clear Creek Valley TOD Plan* estimates 1,135,400 s.f. of office and 467,000 s.f. of retail. This large amount of commercial property will generate a positive fiscal impact to the county and/or any districts created to finance new infrastructure. Moreover, the successful development of the Federal Blvd. TOD will facilitate investment around the Pecos station, which should include an additional 46,000 s.f. of retail and 1,265,000 s.f. of light industrial space. In sum, we believe the Clear Creek Transit Village will become the anchor for the surrounding area which according to Adams County’s Plan will help spur 3 million square feet of commercial space in the study area.

Conclusion
The TOD Group is excited to partner with Adams County, the community, RTD and other local business and organizations to create the Clear Creek Transit Village. All development projects contain constraints and opportunities. We look forward to working with all partners to overcome any constraints and maximize opportunities to create a successful, sustainable TOD.

Any questions about this plan can be directed to:

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Appendix:

Letters of Support from TOD and Sustainability Experts

Professor Robert Cervero, University of California at Berkeley
Professor Peter Newman, Curtin University of Technology, Australia
February 2, 2009

Adams County Planning Department

Dear Planning Department:

I am a Professor in City and Regional Planning at the University of California, Berkeley with a considerable interest in Transit Oriented Development (TOD). This is topic I have studied, lectured, advised, and written extensively on over the past two decades. I also serve on the Advisory Board of The TOD Group, providing advice related to land-use and transportation planning issues, including benchmarks necessary to support economically viable and sustainable TODs.

Professor John Renne, Managing Director of The TOD Group, has shared with me the Clear Creek Valley TOD Plan, an element of the County Comprehensive Plan. First of all, I applaud the Adams County Planning Department and its Board for aggressively pursuing TOD, arguably the most sustainable and widely accepted form of smart growth. Your proposal to cluster compact, mixed-use, and pedestrian development in Clear Creek Valley has merits in its own right but also contributes to the larger regional vision of sustainable growth as embodied in DRCOG’s Metro Vision 2020. The aggressive expansion of light-rail services in the Denver region provides tremendous opportunities for county planning entities like yours to channel future growth in and around planned rail stops to the benefit not only local residents and businesses but also the region at large.

Years of research has established that among the most important factors to the formation of successful TODs — in terms of both ridership and economic vitality — is density. It’s not just a play on words that “mass transit needs mass”. A body of research has established that gross densities of at least 20 units per acre, which typically translates into net densities of 30 to 40 units per net acre, are needed to economically justify rail investments. Portland, Oregon’s TriMet, for example, has set minimum density thresholds of 30 units per net acre, without any cap, for development within ¼ mile of light-rail stations. Portland is without question America’s best example to date of planning and building economically successful and financially viable TODs around light-rail stations thus it provides, in my view, the best benchmark available for setting density thresholds in and around light-rail stations.

A common reaction to the prospect of higher densities is that they contribute to worsening traffic congestion at nearby intersections. While traffic densities rise with urban densities, they do so at a diminishing rate. Moreover, in transit-served districts, residents, workers, and shoppers have alternative means — notably visible public transit — for avoiding the congestion. Stated another way, transit ridership rates rise exponentially with urban densities: 30 units per net acre will generate more than twice as many transit trips per 1000 square feet as 15 units per net acre. Indeed, research based on point elasticities suggests a doubling of net densities in such settings will increase ridership by a factor of 2.3.

Much of the ridership bonus from increasing densities in and around TODs comes from self-selection. For lifestyle reasons, increasing numbers of households (drawn particularly from young professionals and empty-nesters) are willing to pay more per square foot for smaller units in comparable settings that are well-served by transit whether to reduce the stress of commuting, enjoy easy access to cultural venues and entertainment districts, or to be in a less car-dependent settings. Often, urban design treatments and public amenities (e.g., civic spaces, street art, attractive streetscapes) are used to soften perceptions of density. The marketplace for such environments is growing. The Center for TOD estimates that upwards of one-third of newly formed households in metropolitan areas like Greater Denver are receptive to living in TODs. Studies show that upon moving into TODs, such individuals act upon their lifestyle preferences by riding transit far more often than typical suburban residents and in many instances, shedding car ownership. My own research shows that around 40 percent of the ridership bonus attributable to TODs comes from self-selection. The key point is the market is producing increasing numbers of households that want living space that is in a vibrant, rail-served community, and will pay more for less for such opportunities. Such households effectively trade off higher housing costs at higher densities for lower transportation costs (including owning fewer cars).

I recently completed a Transit Cooperative Research Program study (TCRP H-27A) that found that vehicle trip generation rates of those living in suburban TODs of Portland, San Francisco Bay Area, and metropolitan Washington were 49% below the norm (based on Institute of Transportation Engineer trip generation rates). Moreover, a follow-up study I am directing shows that parking generation rates of TODs are around 20 percent below ITE standards. Over-providing parking in TODs not only waste valuable real estate but also drive up housing prices (particularly for podium, high-rise parking) and creates environmental costs from the larger footprint of impervious surface. Unbundling parking provision from development is one sensible way to allow parking supplies to be adjusted to market demand. Marrying TOD with carsharing provides another viable means to reduce parking’s footprint in and around TOD. My research on carsharing in the Bay Area showed that within 3 years, 30 percent of participants shedded one more more cars. For projects near rail stations, even larger shares of car-sharers sold off a car.

To ensure successful transit investments and to leverage financially viable TODs, it is vital that planning entities like yours take a longer range perspective. While higher densities might produce some near-term problems with spot congestion, in the long term they form the building blocks to a successful regional transit network that relieve ambient congestion levels and improve environmental conditions. In the case of the
Denver region, as the light-rail network expands, settings like Adams County will reap the spillover and synergistic benefits that come from transit services that provide enhanced regional coverage and accessibility. Putting larger shares of your future growth in and around rail stops will pay off even more as the region’s transit network expands.

Besides density, striking a viable balance of mixed-use development is also essential to a successful TOD. Mixing housing with retail and offices not only boosts ridership (on the order of 5 to 10 percent, based on my own research), but also allows for increased internal capture: movements that would otherwise be private automobile over longer distances instead occur within the mixed-use project by foot. The beauty of mixed-use development is it adds vitality to a project by populating the development many hours of the day, seven days week. This helps to keep trans full and if done throughout a region, ensure efficient, bi-directional travel flows. Moreover, mixed-use development allows for shared parking—upwards of 20% in some settings—which further economizes on land and development costs.

In closing, I strongly urge you to refrain from the all-too-common practice of under-zoning and over-parking your TOD plan. In keeping with unfolding market forces and lifestyle preferences, Adams County should strongly consider the flexing of zoning regulations and design standards to allow considerably higher densities and a more mixed-use portfolio of activities in the Clear Creek Valley TOD Plan. This will ensure not only a more successful development economically, but one that also yields broader societal benefits expressed in less car dependence, cleaner air, and the resourceful use of land and open space.

Sincerely,

Robert Cervero,  
Professor of City and Regional Planning 
Director, Institute of Urban and Regional Development
I urge you to reconsider this plan and enable the site to fulfill its promise as a TOD.

Sincerely

Peter Newman

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