



HTRZ Proposal Review

Governor's Office of Economic Opportunity
Vineyard Station HTRZ Review
October 22, 2022



ZIONS PUBLIC FINANCE, INC.

REVIEW OF VINEYARD STATION HTRZ PROPOSAL

This independent review of the proposed Vineyard Station HTRZ by Zions Public Finance, Inc. (ZPFI) is prepared in accordance with Utah Code 63N-3-604(3)(b) which requires a gap analysis that includes the following elements:

- (i) A description of the planned development;
- (ii) A market analysis relative to other comparable project developments included in or adjacent to the municipality or public transit county absent the proposed housing and transit reinvestment zone;
- (iii) An evaluation of the proposal to and a determination of the adequacy and efficiency of the proposal;
- (iv) An evaluation of the proposed increment capture needed to cover the enhanced development costs associated with the housing and transit reinvestment zone proposal and enable the proposed development to occur; and
- (v) Based on the market analysis and other findings, an opinion relative to the minimum amount of potential public financing reasonably determined to be necessary to achieve the objectives described in Subsection 63N-3-603(1).

Description of the Planned Development

The planned development is for very high-density development adjacent to the Vineyard FrontRunner station.

There are three distinct areas proposed for the development, with approximately 76 acres in Town Center, 76 acres in Mixed-Use Promenade, and 65 acres in Mixed Use Village.

- Town Center – adjacent to Frontrunner and with the highest proposed densities of residential, retail and office
- Mixed Use Promenade – includes more civic space than the other two districts and less density than Town Center
- Mixed Use Village – somewhat less density than Mixed Use Promenade



Development plans are for nearly 17.8 million residential SF with a density of 145,000 SF per acre in the Town Center and an average density of nearly 82,000 SF per acre overall. The development anticipates 590,000 SF of retail space with the large share of it (500,000 SF) located in the Town Center. The Town Center will also house most of the office development, estimated at 2.25 million SF in the Town Center and 2.6 million SF overall.

TABLE 1: DEVELOPMENT PROJECTIONS

	Land Area	Housing		Retail		Office		TOTAL
		SF/Acre	SF	SF per Acre	SF	SF/Acre	SF	TOTAL SF
Town Center	75.95	145,000	11,012,750	6,583	500,000	29,625	2,250,000	13,762,750
Promenade	75.95	58,000	4,405,100	790	60,000	2,633	200,000	4,665,100
Village	65.10	36,250	2,359,875	461	30,000	2,458	160,000	2,549,875
TOTAL	217.00	81,925	17,777,725	2,719	590,000	12,028	2,610,000	20,977,725

This area is zoned for unlimited height and density which allows for the type of development presented in the Proposal.

Market Analysis Relative to Other Comparable Project Developments Included in or Adjacent to the Municipality or Public Transit County Absent the Proposed Housing and Transit Reinvestment Zone

While there is no current development in Utah County that is similar to that proposed for the Vineyard Frontrunner Station, this analysis looks at other recent developments in the Utah County market to see what is occurring without HTRZ incentives. The Proposal suggests that the following is the difference in development that will occur depending on HTRZ approval.

TABLE 2: COMPARISON OF DEVELOPMENT WITH AND WITHOUT HTRZ APPROVAL

	Market-Driven	With HTRZ	Difference
Town Center			
Residential	2,887,500	7,940,625	5,053,125
Retail	1,000,000	2,250,000	1,250,000
Office	400,000	500,000	100,000
Civic	100,000	100,000	
Mixed Use Promenade			
Residential	2,681,250	5,362,500	2,681,250
Retail	200,000	200,000	
Office	60,000	60,000	
Civic	250,000	250,000	
Mixed Use Village			
Residential	2,062,500	2,062,500	
Retail	160,000	160,000	
Office	30,000	30,000	
Civic	60,000	60,000	

Comparative Project Developments

The following tables show comparative rents in Vineyard and in Utah County. The Proposal suggests that rents of \$1.83 per residential square foot are currently achievable in Utah County. This results in average rents of \$1,510 per unit (average unit size of 825 sf based on the Proposal). Clearly, rents will vary depending on unit size but \$1.83 per square foot is the overall average used in this analysis (taken from the Proposal) and appears reasonable given the research of comparative projects. Table 3 shows rents in Vineyard while Table 4 shows comparative rents in Utah County.

TABLE 3: COMPARATIVE RENTS IN VINEYARD

Apartment	Description	SF	Rent	Rent per SF
Concord at Geneva	1 BD/1BA	709	\$1,447	\$2.04
Mill Point	1 BD/1BA	784	\$1,329	\$1.70
Mill Point	2 BD/2 BA	1,112	\$1,529	\$1.38
The Alloy at Geneva	1 BD/1BA	729	\$1,496	\$2.05
The Alloy at Geneva	2 BD/2 BA	978	\$1,553	\$1.59
The Alloy at Geneva	2 BD/2 BA	987	\$1,678	\$1.70
The Alloy at Geneva	3 BD/2 BA	1,237	\$1,946	\$1.57
Axis in Orem	1 BD/1BA	561	\$1,299	\$2.32

Source: apartments.com

TABLE 4: COMPARATIVE RENTS IN UTAH COUNTY

Vacancy 2.3%	50-99 units		100+ units		Overall	
	Rent	\$/SF	Rent	\$/SF	Rent	\$/SF
Studio	NA	NA	NA	NA	\$1,218	\$2.11
1 BD/1BA	\$882	\$1.63	\$1,245	\$1.63	\$1,216	\$1.62
2 BD/1 BA	\$995	\$1.39	\$1,291	\$1.51	\$1,238	\$1.49
2 BD/2 BA	\$1,318	\$1.25	\$1,591	\$1.51	\$1,585	\$1.51
3 BD/2 BA	NA	NA	\$1,822	\$1.38	\$1,921	\$1.38
Overall	\$980	\$1.42	\$1,454	\$1.53	\$1,432	\$1.52

Source: CBRE Greater Salt Lake Area Multi-Family Market Report 2021 Review | 2022 Outlook

According to CBRE, the 2021 apartment vacancy rate averaged 2.3 percent, and rents increased year-over-year in 2021 by 19.7 percent. The highest rate of increase was noted in the 3-bedroom category.

There are no comparative projects of mixed use, residential buildings that are higher than 80 feet in the local area. This is because current market rents will not support steel frame or concrete construction. The surrounding area is shown in figure 1.

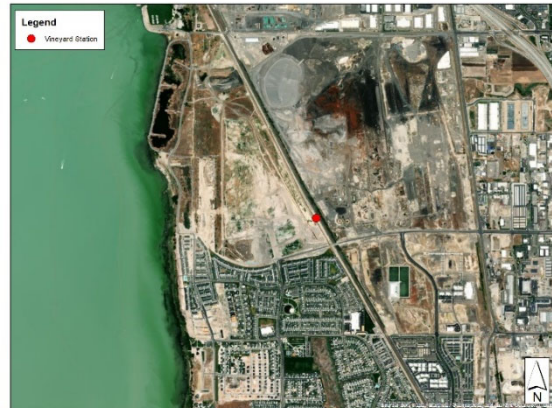


Figure 1: Area Surrounding Proposed HTRZ

An Evaluation of the Proposal to and a Determination of the Adequacy and Efficiency of the Proposal

This section evaluates whether or not the Proposal has met all of the requirements of Utah Code 63N-3-604(a) which requires the following elements:

- (i) Demonstrates that the proposed housing and transit reinvestment zone will meet the objectives described in Subsection 63N-3-603(1);
- (ii) Explains how the municipality or public transit county will achieve the requirements of Subsection 63N-3-603(2)(a);
- (iii) Defines the specific transportation infrastructure needs, if any, and proposed improvements;
- (iv) Defines the boundaries of:
 - a. The housing and transit reinvestment zone; and
 - b. The sales and use tax boundary corresponding to the housing and transit reinvestment zone boundary, as described in Section 63N-3-610;
- (v) Identifies any development impediments that prevent the development from being a market-rate investment and proposed strategies for addressing each one;
- (vi) Describes the proposed development plan, including the requirements described in Subsections 63N-3-603(2) and (4);
- (vii) Establishes a base year and collection period to calculate the tax increment within the housing and transit reinvestment zone;
- (viii) Establishes a sales and use tax base year to calculate the sales and use tax increment within the housing and transit reinvestment zone;
- (ix) Describes projected maximum revenues generated and the amount of tax increment capture from each taxing entity and proposed expenditures of revenue derived from the housing and transit reinvestment zone;
- (x) Includes an analysis of other applicable or eligible incentives, grants, or sources of revenue that can be used to reduce the finance gap;
- (xi) Evaluates possible benefits to active and public transportation availability and impacts on air quality;
- (xii) Proposes a finance schedule to align expected revenue with required financing costs and payments; and
- (xiii) Provides a pro-forma for the planned development including the cost differential between surface parked multi-family development and enhanced development that satisfies the requirements described in Subsections 63N-3-603(2), (3) and (4)

The following section briefly summarizes whether the Proposal has adequately responded to each of these elements.

- (i) ***Demonstrates that the proposed housing and transit reinvestment zone will meet the objectives described in Subsection 63N-3-603(1)***
 - (a) Higher utilization of public transit:
The development of approximately 17,778 residential units, 2.6 million SF of office space and 590,000 square feet of retail space will greatly increase the population and employment within a walkable distance of Frontrunner and thus should significantly impact ridership.
 - (b) Increasing availability of housing, including affordable housing;

- The Proposal includes 17,778 residential units and states that 2,000+ of these units will be attainable, thus easily meeting the 10 percent HTRZ requirement.
- (c) Conservation of water resources through efficient land use;
The vertical nature of the structures will limit the amount of water needed to maintain landscaping and thereby conserve water resources.
- (d) Improving air quality by reducing fuel consumption and motor vehicle trips;
The Proposal cites a reduction in motor vehicle trips, due to increased transit ridership. This will result in a reduction of fuel consumption and transportation costs for households.
- (e) Encouraging transformative mixed-use development and investment in transportation and public infrastructure in strategic areas;
The Proposal states that this community will include residential, retail, educational, commercial, worship, office and recreation – everything to make an attractive and fully functioning community. The Proposal further states that this community will be unique among any of the FrontRunner stations as it is being designed from the ground up as a very dense, modern and sustainable community.
- (f) Strategic land use planning in major land use investment corridors;
This development is strategically located next to a FrontRunner station which provides direct access to the Salt Lake City International Airport. It is also within a short distance of the Provo Airport and major interchanges including I-15.
- (g) Increasing access to employment and educational opportunities;
The development includes 2.6 million square feet of office space, thereby increasing access to employment opportunities via public transit. Utah Valley University lies directly east of this proposed development, thereby providing significant educational opportunities to the high-density population anticipated in the Town Center.
- (h) Increasing access to child care.
While the Proposal does not directly address access to child care, the proximity of educational and employment opportunities likely also offer access to child care.
- (ii) *Demonstrates that the proposed housing and transit reinvestment zone will meet the objectives described in Subsection 63N-3-603(1);***
The Proposal states that it will meet the objectives through the following:
- Increased public transit utilization and accompanying positive impacts to air quality
 - Reduced vehicle trips, fuel consumption, and emissions;
 - Increased housing supply and 2,000+ units of attainable housing;
 - Increased access to employment (2.6 million SF of office space and 590,000 SF of retail space) and educational opportunities; and
 - Transformative mixed-use development designed by nationally-recognized transit-oriented and urban designers
- (iii) *Explains how the municipality or public transit county will achieve the requirements of Subsection 63N-3-603(2)(a);***
The Proposal states that the development will include 2,000+ attainable housing units which meets the requirement for 10 percent affordability. The Proposal sets forth 15,365,625 square feet of residential space (Section 6 of the Proposal) and 17,778 residential units. This results in an overall density of 82 units per acre, with some areas reaching densities of 300 residential units per acre.

(iv) ***Defines the specific transportation infrastructure needs, if any, and proposed improvements;***
 The Proposal states that over the past couple of years a collaboration of public and private contributors have invested in excess of \$40M in the immediate area surrounding the Vineyard station. These improvements have enhanced the ability of potential riders to access the station through a variety of modalities. Roadway infrastructure, bridge overpass connections, bike lanes, and walking trails have all been installed to facilitate and activate the train station and connect the surrounding property. Railway infrastructure such as double-tracking, platform and station construction, and spur-line relocation efforts have already been anticipated and, in many cases, completed. Public/private partnerships have allowed use of private land near the train station for platform construction and to be utilized by the public agencies for transit parking. While HTRZ financing is available for infrastructure needs, most of the infrastructure needs in this potential HTRZ have been pre-planned and completed. Therefore, the Proposal suggests that HTRZ tax increment funds could be better used, at this point in time, for increased height and building density.

(v) ***Defines the boundaries of:***
 a. ***The housing and transit reinvestment zone; and***
 b. ***The sales and use tax boundary corresponding to the housing and transit reinvestment zone boundary, as described in Section 63N-3-610;***
 The Proposal clearly sets forth the boundaries as shown in Sections 7 and 8 of the Proposal, and as set forth herein for reference.



Figure 2: HTRZ Proposed Boundaries

(vi) ***Identifies any development impediments that prevent the development from being a market-rate investment and proposed strategies for addressing each one;***
 The Proposal identifies impediments as the increased costs of building heights associated with Type 1 (steel frame and concrete) construction, along with the added parking costs. With heights above 80 feet, construction costs are roughly twice that of Standard Type 5 construction. Rents in Utah County are currently not sufficient to justify the added cost and land costs are not driving increased heights.

(vii) ***Describes the proposed development plan, including the requirements described in Subsections 63N-3-603(2) and (4);***
 The Development Plan is general and while it specifies the amount of development projected overall in each of the three geographic locations of the development plan, it does not provide information regarding the number of residential units projected for 4-story, 8-story, higher than 8-story, etc. construction. This information is important as it correlates directly with the amount of public assistance needed for the project to move forward. See Table 2 above for the development plan information provided.

The following specific requirements are included:

- *At least 10% of the proposed dwelling units within the housing and transit reinvestment zone are affordable housing units;*

The proposal states that there will be at 2,000+ affordable units in this development which is intended to represent at least 10 percent of all residential units. The total number of residential units is projected at 17,778.

- *At least 51% of the developable area within the housing and transit reinvestment zone includes residential uses with, except as provided in Subsection (4)(c), an average of 50 dwelling units per acre or greater;*

Section 6 of the Proposal states the following percentages of residential development by geographic area:

- *Town Center – 51% - 75%*
- *Mixed Use Promenade - 80% - 95%*
- *Mixed Use Village - - 85% - 95%*

With a total land area of 217 acres and plans for 17,778 residential units, the average density is 82 units per acre, with some areas having notably more density than others.

- *Mixed-use development*
Plans are clearly for a mix of residential, retail, educational and office use.
- *Mix of dwelling units to ensure that a reasonable percentage of the dwelling units has more than one bedroom*
The Proposal does not state the percentage, or number, of planned units by number of bedrooms. Note that the pro forma in Section 12, which shows bedrooms, is for another project that that the developer built in the Vineyard Town Center – not for this specific project.
- *Is within a 1/3-mile radius*

Utah Code 63N-3-603(5)(a) states that for a housing and transit reinvestment zone for a commuter rail station, if a parcel is bisected by the relevant radius limitation, the full parcel may be included as part of the housing and transit reinvestment zone area and will not count against the limitations described in Subsection (4)(a)(i).

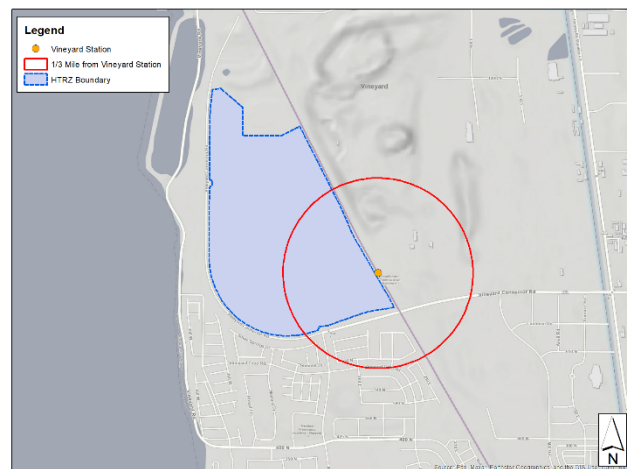


Figure 3: 1/3-mile radius

Based on the above clarification in the law, the entire parcel can be included in the HTRZ although it extends beyond the 1/3-mile radius.

- *Other Issues – Location within an existing CRA*

This proposed HTRZ is located within an already-existing redevelopment area. While the HTRZ can be overlaid on the existing Geneva Urban Renewal Project Area, this will change the increment projections for the existing Geneva Urban Renewal Project Area. Utah Code specifically addresses this issue and makes it clear that an HTRZ can proceed under such circumstances:

63N-3-608. Applicability to an existing community reinvestment project. For a housing and transit reinvestment zone created under this part that overlaps any portion of an existing inactive industrial site community reinvestment project area plan created pursuant to Title 17C, Limited Purpose Local Government Entities - Community Reinvestment Agency Act:

MAP OF PROJECT AREA

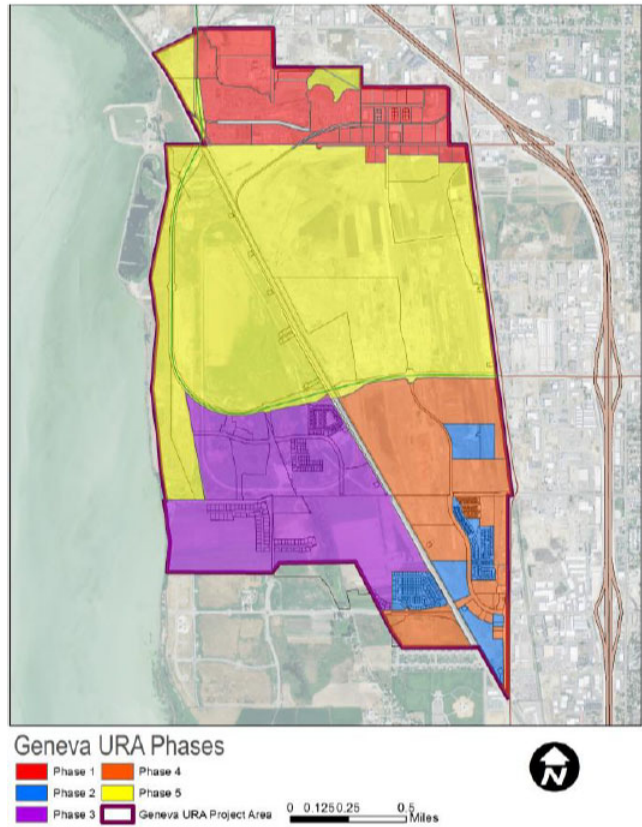


Figure 4: Existing Geneva URA

(1) if the community reinvestment project area plan captures less than 80% of the tax increment from a taxing entity, or if a taxing entity is not participating in the community reinvestment project area plan, the housing and transit reinvestment zone may capture the difference between:

- (a) 80%; and
 - (b) the percentage of tax increment captured pursuant to the community reinvestment project area plan; and
- (2) if a community reinvestment project area plan expires before the housing and transit reinvestment zone, the housing and transit reinvestment zone may capture the tax increment allocated to the community reinvestment project area plan for any remaining portion of the term of the housing and transit reinvestment zone.

(viii) Establishes a base year and collection period to calculate the tax increment within the housing and transit reinvestment zone;

In Section 7, the Proposal identifies 2022 as the base year with increment triggering in year 6, based on Section 11. The collection period appears to be 25 years although Utah Code 63N-3-

603(4)(a)(ii) allows for the collection of increment for a period of 25 years on each parcel within a 45-year period not to exceed the tax increment amount approved in the housing and transit reinvestment zone proposal.

(ix) *Establishes a sales and use tax base year to calculate the sales and use tax increment within the housing and transit reinvestment zone;*

Section 11 of the Proposal clearly shows property and sales/use tax projections beginning six years in the future. Section 9 projects the total property and sales tax increment generated. ZPFI has reviewed the projections and created a similar spreadsheet of anticipated revenues, attached as Appendix A to this report. ZPFI's revenue projections are based on the absorption and pricing assumptions provided in the Proposal. Revenue projections are very similar between the Proposal and the ZPFI calculations.

(x) *Describes projected maximum revenues generated and the amount of tax increment capture from each taxing entity and proposed expenditures of revenue derived from the housing and transit reinvestment zone;*

In Section 9, the Proposal shows the amount of tax increment generated by each taxing entity. Tax increment calculations have also been performed by ZPFI and included in Appendix A. The Proposal, in Section 9, shows reimbursable costs in Years 6, 9 and 11.

(xi) *Includes an analysis of other applicable or eligible incentives, grants, or sources of revenue that can be used to reduce the finance gap;*

The RDA has helped provide financial support for environmental remediation in the project area. In addition, a reimbursement agreement is in place between Vineyard and the developer, which makes RDA tax increment available to reimburse the developer over time for the installation of some public infrastructure. The developer is also exploring the RRIF and TIFIA loan programs through the US Department of Transportation; however, no proposal has been made.

(xii) *Evaluates possible benefits to active and public transportation availability and impacts on air quality;*

The Proposal states that with the high-density development next to the FrontRunner station, ridership will increase and air quality will improve due to reduced vehicle trips. The Proposal provides no estimates of increased ridership.

(xiii) *Proposes a finance schedule to align expected revenue with required financing costs and payments; and*

The Proposal includes a finance schedule in Section 11 but it simply matches the revenues generated by the TIF projections and is not a true finance schedule of required financing costs.

(xiv) *Provides a pro-forma for the planned development including the cost differential between surface parked multi-family development and enhanced development that satisfies the requirements described in Subsections 63N-3-603(2), (3) and (4)*

The Applicant has not provided a pro forma for the planned development as the Code specifically requires. Rather, Section 12 of the Proposal states, "The below proforma is from a project in the Vineyard Town Center that will be breaking ground in the Fall of 2022. This project includes developing to the most creative and walkable standard within the bounds of

what the Utah County market can support today. It is 4 stories and mostly surface parked with a mix of apartments and ground floor town homes developed at 50 units per acre.”

The following page of the Proposal then states, “The below proforma compares the same project but with an increase in development vertical density from 50 to 300 units per acre. The added cost of the increase in vertical development density adjacent to the train station would be reimbursed back to the developer over the reimbursement period.”

An Evaluation of the Proposed Increment Capture Needed to Cover the Enhanced Development Costs Associated with the Housing and Transit Reinvestment Zone Proposal and Enable the Proposed Development to Occur

This section discusses added costs to the developer from two components:

- 1) steel frame/concrete construction of buildings over 80 feet in height; and
- 2) lost revenues and valuation from affordable housing units

Vertical Costs of Steel Frame Construction

In Section 12 of the Proposal, the developer states that, “the added cost of the increase in vertical development density adjacent to the train station would be reimbursed back to the developer over the reimbursement period.” No specific increment amount is requested, nor does the Proposal include a pro forma for this specific development. Rather, it takes a pro forma from a previous project in the Vineyard Town Center and compares that pro forma for 433 residential units (Type 5, standard wood frame construction) with the increased costs for steel frame/concrete type development. While this development is projected to have many more additional residential units, our analysis takes the limited pro forma information provided and calculates costs and funding needs on a per unit and per building square foot basis and thus works around the limited information provided.

There is no question that there are added costs associated with buildings above 80 feet in Utah County. The Proposal provides the following estimates of increased costs:

TABLE 7: COMPARATIVE BUILDING COSTS

	No Height Limit	8 Floors Max	5 Stories	4 Stories
Vertical Cost	\$480	\$380.00	\$275.00	\$250.00
Parking per Stall	\$35,000 - \$40,000	\$35,000 - \$40,000	\$20,000 - \$35,000	\$20,000
Rent to justify per sf	\$3.10	\$2.65	\$2.15	\$1.90
Rent to justify - 1 bdrm	\$2,250	\$1,950	\$1,550	\$1,300
Assumed SF of 1 bdrm	726	736	721	684

Research from several large construction companies active in Utah¹ suggests that the above costs are reasonable. All of the construction companies interviewed stressed that costs vary depending on the site.

¹ Zwick Construction, Layton Construction and Jacobsen Construction. Some costs were provided on a leasable square footage basis while others were provided on gross square feet. Adjustments were made so that estimates were

For example, it is much more expensive to build in downtown Salt Lake where it is more difficult and costly to perform tasks such as placing a crane. Costs in the construction market have also been volatile in the recent past, again making it difficult to come up with accurate projections.

Costs provided by the construction companies for Type 1 construction were approximately \$483 - \$570 per sf (not including land). This analysis breaks down costs by vertical costs, site costs, development fees and parking fees and uses a cost of \$550 per square foot.

In order to assess the feasibility of construction under various scenarios, ZPFI has conducted a simple profitability analysis for Type 1 construction (steel frame/concrete) as compared to Type 5 (standard 4-story wood frame) construction.

Type 5 Construction (Typical)

Type 5 construction (typical) is 4-story wood frame construction with a standalone parking structure. The density usually ranges from 40 to 60 units per acre.²

TABLE 9: ASSUMPTIONS FOR TYPE 5 CONSTRUCTION

Assumption	Amount
Units per Acre	50
Total Units	433 ³
Average Unit Size	825
Average Rent Per Month/SF	\$1.83
Stabilized Vacancy	5%
Gross Building Size	410,809
Direct Construction Costs	\$250
Other Costs	\$35
Land Costs per SF	\$16.00

Using the assumptions above, effective gross income (EGI) is first calculated.

TABLE 10: EFFECTIVE GROSS INCOME (EGI) CALCULATION – TYPE 5 CONSTRUCTION

Multi-Family	Number of Units	Average Unit Size	Rent Per Unit/Month	Annual
Estimated Market Rent - Multi-Family	433	825	\$1,510	\$7,844,661
Other Income (storage, late fees, etc.)	15.00%			\$1,176,699
Admin Fees	2.52%			\$197,685

consistent between the costs provided. This analysis uses costs on a leasable square foot basis in order to maintain consistency with rental revenues.

² The pro forma analysis submitted in the Proposal assumes 433 units based on a recently completed project by Woodbury in the Vineyard area. The purpose of this analysis is to identify the amount of subsidy needed per unit in buildings taller than 75 feet. Therefore, by comparing the public assistance needed on a per unit basis, it is irrelevant that the pro forma submitted uses 433 units and that the proposed development is much larger in size.

³ The Proposal envisions far more than 433 units; however, the pro forma provided uses 433 units. Therefore, this analysis begins with 433 units and then evaluates costs on a residential per unit basis.

Multi-Family	Number of Units	Average Unit Size	Rent Per Unit/Month	Annual
Potential Gross Income (PGI)	<i>Total Size</i>	357,225		\$9,219,046
	% of PGI			
Less Stabilized Vacancy	5%			(\$460,952)
Effective Gross Income (EGI)				\$8,758,093

The next step is to evaluate operating expenses in order to arrive at the net operating income (NOI). NOI is an extremely important number as it is used to calculate valuation of the property.

TABLE 11: CALCULATION OF NET OPERATING INCOME – TYPE 5 CONSTRUCTION

	% of EGI	Per Unit/Year	Total
Management	3%		(\$262,743)
Reserves	1%		(\$87,581)
Utilities		\$1,500	(\$649,500)
Maintenance & Repair		\$1,200	(\$519,600)
Admin		\$815	(\$352,895)
Property Taxes		\$1,732	(\$749,956)
Insurance		\$500	(\$216,500)
Total Expenses			(\$2,838,775)
	<i>Per unit/Year</i>	\$6,556	
Net Operating Income (NOI)			\$5,919,319

The construction costs are calculated based on information provided in the Proposal, as well as from interviews with local construction companies.

TABLE 12: CALCULATION OF CONSTRUCTION COSTS – TYPE 5 CONSTRUCTION

	Per Sq. Ft.	Total
Direct Costs - Building	\$250	\$89,306,250
Indirect Costs and Parking	\$35	\$12,502,875
Total Direct, Indirect and Parking		\$101,809,125
Land Costs	\$16.00	\$6,035,674
TOTAL Costs + Land		\$107,844,799
	Per Unit	\$249,064

Construction costs are then compared to net operating income in order to evaluate the relative profitability of a project given different CAP rates. CAP rates are a measure of the rate of return that a property is expected to generate based on the income that a property is expected to produce currently. The CAP rate is a function of net operating income (NOI) divided by total construction costs (or market value for projects previously built). In today's market, CAP rates are currently very low for multifamily units indicating optimistic conditions where buyers expect future appreciation of rents and properties to occur and are therefore willing to accept lower CAP rates (i.e., a lower NOI compared to market value) at the time of purchase. However, the last few weeks have seen a rise in CAP rates as the market demonstrates some uncertainty about a recession.

A range of CAP rates has been provided in the valuation analysis below. Revenues and expenses are constant throughout the analysis. As can be seen in the last column, the returns on apartment complexes of 4 stories or less are significant in today’s market. Clearly, no incentives are needed for wood frame construction with standalone/surface parking. To be clear, the applicant is not requesting any aid for this type of construction, of which there will be some in the development. The purpose of analyzing Type 5 (standard) construction is to compare it with Type 1 (steel frame/concrete) construction.

TABLE 13: VALUATION ANALYSIS – TYPE 5 CONSTRUCTION

Capitalization Rate	Value	Per Unit	Per SF	Value Spread with Costs/per Unit	Value Spread with Costs/SF	Profit %
4.25%	\$139,278,085	\$321,658	\$339	\$72,594	\$77	29.1%
4.5%	\$131,540,413	\$303,788	\$320	\$54,724	\$58	22.0%
5.0%	\$118,386,372	\$273,410	\$288	\$24,345	\$26	9.8%

Type 1 Construction (Steel Frame/Concrete Construction)

With Type 1 construction (steel frame/concrete and no height restrictions), costs are anticipated to reach \$550 per square foot, including parking.⁴ Land costs are additional. As the table below shows, this would be a losing proposition for a developer without some sort of public assistance.

TABLE 14: VALUATION ANALYSIS – TYPE 1 CONSTRUCTION

Capitalization Rate	Value	Per Unit	Per SF	Value Spread with Costs/Per Unit	Value Spread with Costs/SF	Profit %
4.25%	\$133,022,809	\$307,212	\$324	(\$148,861)	(\$157)	-32.6%
4.5%	\$125,632,653	\$290,145	\$306	(\$165,929)	(\$175)	-36.4%
5.0%	\$113,069,388	\$261,130	\$275	(\$194,943)	(\$205)	-42.7%

How much public assistance is needed to promote Type 1 development? Our analysis suggests that an incentive of approximately 50 percent of the direct, indirect and parking costs (not including development fees and land) results in a scenario that is roughly comparable to the profits generated by Type 5 standard construction. This incentive would ONLY be applied to buildings higher than roughly 80 feet and that require steel frame/concrete construction. With this level of incentive, profits are similar to those under Type 5 construction.

TABLE 15: VALUATION ANALYSIS – TYPE 1 CONSTRUCTION WITH INCENTIVES

Capitalization Rate	Value	Per Unit	Per SF	Value Spread with Costs/Per Unit	Value Spread with Costs/SF	Profit %
4.25%	\$133,022,809	\$307,212	\$324	\$70,538	\$74	29.8%
4.5%	\$125,632,653	\$290,145	\$306	\$53,471	\$56	22.6%
5.0%	\$113,069,388	\$261,130	\$275	\$24,457	\$26	10.3%

⁴ This is on a leasable square foot basis, not gross square feet, and includes all finishes, amenities and development fees.

Construction costs will change in the future. Therefore, we feel that using a ratio of reimbursement dollars to direct, indirect and parking costs (less development fees and land) is the easiest way to structure this incentive rather than trying to identify a reimbursement amount per unit or square foot and then adjusting each year with construction cost indices. It also complies with the developer’s request that “the added cost of the increase in vertical development density adjacent to the train station would be reimbursed back to the developer over the reimbursement period.”

Note that the analysis in the following table is based on 433 units (based on the Proposal submitted) and therefore the TIF incentive amount shown in the table does not apply to this project. It is used, however, to figure the costs on a per unit basis and the percentage of reimbursable costs needed for this project to move forward.

TABLE 16: VALUATION ANALYSIS – TYPE 1 CONSTRUCTION WITH INCENTIVES

	Per Leasable SF	Total
Direct Costs	\$450	\$160,751,250
Indirect Costs	\$55	\$19,647,375
Parking	\$45	\$16,075,125
TOTAL Costs (not incl. land)		\$196,473,750
Land Costs	\$16	\$1,005,946
TOTAL COSTS PLUS LAND		\$197,479,696
Less: TIF Incentive		\$95,000,000
Estimated Development Fees (5% of Direct Costs)		\$8,037,563
Ratio of Incentive to Total Costs (not incl. land or development fees)		50%
Ratio of Incentive to Total Direct and Indirect Costs (not incl. parking, land or development fees)		55%

Affordable Housing Units

In addition, the developer would need to be incentivized to build affordable units throughout the project – for any type of construction (wood frame, podium with wood frame, steel, concrete, etc.). This is because the developer receives lower rents for affordable units as compared to market rents and incurs additional costs for administration and bookkeeping.

Based on the information provided in tables 3 and 4 of this report, \$1,510 average rent per unit would seem justifiable and is within the range shown in other apartment complexes. Rents will vary depending on the size and type of units, but \$1,510 is assumed as an average across all units.⁵ Based on our research and HUD guidelines, a household making 80 percent of area median income (AMI) should not spend more than 30 percent of total household income on housing costs, including utilities.

TABLE 17: HUD INCOME GUIDELINES AND AFFORDABLE RENTS

	2-person HH	3-person HH
80% of AMI	\$59,950	\$67,450
Affordable Rent Less Utilities	\$1,210	\$1,386

⁵ The number of planned units of each type (i.e., studio, 1-bedroom, 2-bedroom, etc.) is not included in the Proposal

	2-person HH	3-person HH
Monthly Rental Loss	\$300	\$124

Source: HUD; ZPFI

These units will likely have 2 or 3 persons per household depending on the mix of units and number of bedrooms. The annual loss in rents, per affordable unit, will likely range between \$1,488 and \$3,600 per affordable unit. Assuming the same assumptions used previously with the development of 433 units, and an average loss between different size units, there is a loss in valuation of approximately \$3.0 million to \$3.3 million depending on the CAP rates used, assuming the development of 433 units as shown in the Proposal pro forma. Divided by the number of affordable units,⁶ this results in a loss of value of approximately \$67,000 - \$76,000 per unit.

TABLE 18: LOSS IN VALUATION FROM REDUCED RENTS (ASSUMES 433 UNITS WITH 10 PERCENT AFFORDABLE)

Capitalization Rate	Value - Mkt Rents	Value - 10% LIH	Difference	Loss per Affordable Unit
4.25%	\$144,207,459	\$140,926,631	\$3,280,828	\$75,770
4.5%	\$135,724,667	\$132,636,830	\$3,087,838	\$71,313
5.0%	\$128,184,408	\$125,268,117	\$2,916,291	\$67,351

Assuming a reimbursement of \$75,000 (\$2022) per affordable unit, this results in a reimbursement of approximately 33.4 percent per affordable unit when comparing \$75,000 to unit costs of \$224,813⁷ (not including land or development fees).

TABLE 19: AFFORDABLE HOUSING RECOMMENDATION

Reimbursement	\$75,000
Standard Unit Cost (not incl. land and development fees)	\$224,813
% Reimbursement per Unit	33.4%

Based on the Market Analysis and Other Findings, an Opinion Relative to the Minimum Amount of Potential Public Financing Reasonably Determined to be Necessary to Achieve the Objectives Described in Subsection 63N-3-603(1)

There is no pro forma submitted for this development that indicates the number of units or square footage anticipated at Type 1 construction. Therefore, it is difficult to recommend a set increment amount as the amount is dependent on the costs associated with Type 1 construction. However, percentages of costs of Type 1 construction and affordable housing units are recommended herein.

To be clear, the applicant is only asking for reimbursement to cover costs associated with:

- Added costs of type 1 (steel frame/concrete) construction – buildings over 80 feet in height

⁶ Assumed to be 10 percent of 433 units

⁷ Calculated as follows: Average Type 5 unit costs equal \$235,125 (\$285 per sf x 825 sf) per unit (not including land). Development fees are calculated as 5 percent of direct costs or \$10,312.50 per unit. This results in a cost of \$224,813 per unit (not including land or development fees).

- Affordable housing units throughout the entire HTRZ (any height of construction)

Based on the analysis of this report, we recommend the following two incentives that would be reimbursed through tax increment generated in the Project Area:

- 50 percent of the vertical, indirect and parking costs (less development fees and not including land) associated with steel frame/concrete construction and buildings over 80 feet in height; or 55 percent of the vertical and indirect costs, less development fees (not including parking costs) associated with steel frame construction and buildings over 80 feet in height
- 33.4 percent of the vertical, indirect and parking costs associated with each affordable housing unit built throughout the entire HTRZ of any height and construction type

It is likely that these incentives will require 80 percent of the increment generated for 25 years on each parcel (maximum period of 45 years).

- Assuming \$75,000 per affordable residential unit (which currently reflects 33.4 percent of costs not including development fees and land), and the construction of approximately 1,778 affordable units, results in total reimbursements of roughly \$133.3 million.
- Total TIF projections are shown in Appendix A of this report and in Section 9 of the Proposal. Both projections are highly similar and suggest a total of \$728 million to nearly \$800 million in property tax revenues (80 percent). The difference in the calculations is that the Proposal uses a total of 25 years while Appendix A uses a total of 25 years per parcel, with a maximum of 45 years. Thus, Appendix A shows slightly higher revenues.
- After affordable housing reimbursements, this leaves roughly \$665 million in property tax revenues to offset the costs of buildings greater than 80 feet in height. This would allow for approximately 3,000 residential units in buildings with heights greater than 80 feet.
- Incremental sales tax revenues are in addition to the amounts described above.

APPENDIX A													
Years	40				1	2	3	4	5	6	7	8	9
	TOTAL	NPV	1	2	3	4	5	6	7	8	9		
Incremental Taxable Value			\$0	\$0	\$0	\$95,695,607	\$259,550,876	\$493,605,052	\$825,888,525	\$1,093,247,471	\$1,392,630,744		
TOTAL Assessed Value			\$0	\$0	\$0	\$95,695,607	\$259,550,876	\$493,605,052	\$825,888,525	\$1,093,247,471	\$1,392,630,744		
100% of Incremental Value													
Utah County	\$73,149,626	\$34,145,599	\$0	\$0	\$0	\$81,628	\$221,397	\$421,045	\$704,483	\$932,540	\$1,187,914		
Multi-County Assessing & Collectinng	\$1,029,069	\$480,360	\$0	\$0	\$0	\$1,148	\$3,115	\$5,923	\$9,911	\$13,119	\$16,712		
County Assessing & Collecting	\$12,177,312	\$5,684,262	\$0	\$0	\$0	\$13,589	\$36,856	\$70,092	\$117,276	\$155,241	\$197,754		
Alpine School District	\$592,057,463	\$276,367,196	\$0	\$0	\$0	\$660,682	\$1,791,939	\$3,407,849	\$5,701,934	\$7,547,781	\$9,614,723		
Vineyard Town	\$285,480,778	\$133,259,907	\$0	\$0	\$0	\$318,571	\$864,045	\$1,643,211	\$2,749,383	\$3,639,421	\$4,636,068		
Central Utah Water Conservancy District	\$34,302,286	\$16,012,004	\$0	\$0	\$0	\$38,278	\$103,820	\$197,442	\$330,355	\$437,299	\$557,052		
Total	\$998,196,533	\$465,949,328	\$0	\$0	\$0	\$1,113,897	\$3,021,172	\$5,745,563	\$9,613,342	\$12,725,401	\$16,210,222		
<i>Utah County</i>			<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Multi-County Assessing & Collectinng</i>			<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>County Assessing & Collecting</i>			<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Alpine School District</i>			<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Vineyard Town</i>			<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Central Utah Water Conservancy District</i>			<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
Incremental Revenues to Taxing Entities													
Utah County	\$14,629,925	\$6,829,120	\$0	\$0	\$0	\$16,326	\$44,279	\$84,209	\$140,897	\$186,508	\$237,583		
Multi-County Assessing & Collectinng	\$205,814	\$96,072	\$0	\$0	\$0	\$230	\$623	\$1,185	\$1,982	\$2,624	\$3,342		
County Assessing & Collecting	\$2,435,462	\$1,136,852	\$0	\$0	\$0	\$2,718	\$7,371	\$14,018	\$23,455	\$31,048	\$39,551		
Alpine School District	\$118,411,493	\$55,273,439	\$0	\$0	\$0	\$132,136	\$358,388	\$681,570	\$1,140,387	\$1,509,556	\$1,922,945		
Vineyard Town	\$57,096,156	\$26,651,981	\$0	\$0	\$0	\$63,714	\$172,809	\$328,642	\$549,877	\$727,884	\$927,214		
Central Utah Water Conservancy District	\$6,860,457	\$3,202,401	\$0	\$0	\$0	\$7,656	\$20,764	\$39,488	\$66,071	\$87,460	\$111,410		
Total	\$199,639,307	\$93,189,866	\$0	\$0	\$0	\$222,779	\$604,234	\$1,149,113	\$1,922,668	\$2,545,080	\$3,242,044		
Incremental Revenues to HTRZ													
Utah County	\$58,519,701	\$27,316,479	\$0	\$0	\$0	\$65,303	\$177,118	\$336,836	\$563,586	\$746,032	\$950,331		
Multi-County Assessing & Collectinng	\$823,255	\$384,288	\$0	\$0	\$0	\$919	\$2,492	\$4,739	\$7,929	\$10,495	\$13,369		
County Assessing & Collecting	\$9,741,849	\$4,547,409	\$0	\$0	\$0	\$10,871	\$29,485	\$56,074	\$93,821	\$124,193	\$158,203		
Alpine School District	\$473,645,970	\$221,093,757	\$0	\$0	\$0	\$528,546	\$1,433,551	\$2,726,279	\$4,561,548	\$6,038,224	\$7,691,778		
Vineyard Town	\$228,384,623	\$106,607,925	\$0	\$0	\$0	\$254,857	\$691,236	\$1,314,569	\$2,199,506	\$2,911,537	\$3,708,854		
Central Utah Water Conservancy District	\$27,441,829	\$12,809,604	\$0	\$0	\$0	\$30,623	\$83,056	\$157,954	\$264,284	\$349,839	\$445,642		
Total	\$798,557,227	\$372,759,462	\$0	\$0	\$0	\$891,117	\$2,416,938	\$4,596,450	\$7,690,674	\$10,180,320	\$12,968,177		
SALES TAX CALCULATIONS													
Gross Sales	\$12,429,219,747	\$5,198,460,184	\$0	\$0	\$0	\$47,356,407	\$108,199,919	\$110,363,917	\$162,826,193	\$172,233,929	\$240,512,379		
Sales Tax Revenues													
State of Utah	\$602,817,158	\$252,125,319	\$0	\$0	\$0	\$2,296,786	\$5,247,696	\$5,352,650	\$7,897,070	\$8,353,346	\$11,664,850		
Vineyard Local Option	\$124,292,197	\$51,984,602	\$0	\$0	\$0	\$473,564	\$1,081,999	\$1,103,639	\$1,628,262	\$1,722,339	\$2,405,124		
County Local Option	\$31,073,049	\$12,996,150	\$0	\$0	\$0	\$118,391	\$270,500	\$275,910	\$407,065	\$430,585	\$601,281		

Years	40		1	2	1	2	3	4	5	6	7	7
	TOTAL	NPV	1	2	3	4	5	6	7	8	9	
Mass Transit	\$31,073,049	\$12,996,150	\$0	\$0	\$0	\$118,391	\$270,500	\$275,910	\$407,065	\$430,585	\$601,281	
Mass Transit Fixed Guideway	\$37,287,659	\$15,595,381	\$0	\$0	\$0	\$142,069	\$324,600	\$331,092	\$488,479	\$516,702	\$721,537	
County Airport, Highway, Public Transit	\$31,073,049	\$12,996,150	\$0	\$0	\$0	\$118,391	\$270,500	\$275,910	\$407,065	\$430,585	\$601,281	
Transportation Infrastructure	\$31,073,049	\$12,996,150	\$0	\$0	\$0	\$118,391	\$270,500	\$275,910	\$407,065	\$430,585	\$601,281	
Cultural Arts & Zoo	\$12,429,220	\$5,198,460	\$0	\$0	\$0	\$47,356	\$108,200	\$110,364	\$162,826	\$172,234	\$240,512	
TOTAL Sales Tax Revenues	\$901,118,432	\$376,888,363	\$0	\$0	\$0	\$3,433,340	\$7,844,494	\$8,001,384	\$11,804,899	\$12,486,960	\$17,437,148	
Amount of State Revenues to TTIF	\$90,422,574	\$37,818,798	\$0	\$0	\$0	\$344,518	\$787,154	\$802,897	\$1,184,561	\$1,253,002	\$1,749,728	

APPENDIX A											
Years	8	9	10	11	12	13	14	15	16	17	18
	10	11	12	13	14	15	16	17	18	19	20
Incremental Taxable Value	\$1,854,275,436	\$1,923,248,826	\$2,487,721,796	\$2,735,498,589	\$2,735,498,589	\$2,735,498,589	\$3,080,697,572	\$3,253,305,505	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637
TOTAL Assessed Value	\$1,854,275,436	\$1,923,248,826	\$2,487,721,796	\$2,735,498,589	\$2,735,498,589	\$2,735,498,589	\$3,080,697,572	\$3,253,305,505	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637
100% of Incremental Value											
Utah County	\$1,581,697	\$1,640,531	\$2,122,027	\$2,333,380	\$2,333,380	\$2,333,380	\$2,627,835	\$2,775,070	\$2,925,985	\$2,925,985	\$2,925,985
Multi-County Assessing & Collectinng	\$22,251	\$23,079	\$29,853	\$32,826	\$32,826	\$32,826	\$36,968	\$39,040	\$41,163	\$41,163	\$41,163
County Assessing & Collecting	\$263,307	\$273,101	\$353,256	\$388,441	\$388,441	\$388,441	\$437,459	\$461,969	\$487,092	\$487,092	\$487,092
Alpine School District	\$12,801,918	\$13,278,110	\$17,175,231	\$18,885,882	\$18,885,882	\$18,885,882	\$21,269,136	\$22,460,821	\$23,682,299	\$23,682,299	\$23,682,299
Vineyard Town	\$6,172,883	\$6,402,495	\$8,281,626	\$9,106,475	\$9,106,475	\$9,106,475	\$10,255,642	\$10,830,254	\$11,419,231	\$11,419,231	\$11,419,231
Central Utah Water Conservancy District	\$741,710	\$769,300	\$995,089	\$1,094,199	\$1,094,199	\$1,094,199	\$1,232,279	\$1,301,322	\$1,372,091	\$1,372,091	\$1,372,091
Total	\$21,583,766	\$22,386,616	\$28,957,082	\$31,841,204	\$31,841,204	\$31,841,204	\$35,859,320	\$37,868,476	\$39,927,861	\$39,927,861	\$39,927,861
<i>Utah County</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Multi-County Assessing & Collectinng</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>County Assessing & Collecting</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Alpine School District</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Vineyard Town</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Central Utah Water Conservancy District</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
Incremental Revenues to Taxing Entities											
Utah County	\$316,339	\$328,106	\$424,405	\$466,676	\$466,676	\$466,676	\$525,567	\$555,014	\$585,197	\$585,197	\$585,197
Multi-County Assessing & Collectinng	\$4,450	\$4,616	\$5,971	\$6,565	\$6,565	\$6,565	\$7,394	\$7,808	\$8,233	\$8,233	\$8,233
County Assessing & Collecting	\$52,661	\$54,620	\$70,651	\$77,688	\$77,688	\$77,688	\$87,492	\$92,394	\$97,418	\$97,418	\$97,418
Alpine School District	\$2,560,384	\$2,655,622	\$3,435,046	\$3,777,176	\$3,777,176	\$3,777,176	\$4,253,827	\$4,492,164	\$4,736,460	\$4,736,460	\$4,736,460
Vineyard Town	\$1,234,577	\$1,280,499	\$1,656,325	\$1,821,295	\$1,821,295	\$1,821,295	\$2,051,128	\$2,166,051	\$2,283,846	\$2,283,846	\$2,283,846
Central Utah Water Conservancy District	\$148,342	\$153,860	\$199,018	\$218,840	\$218,840	\$218,840	\$246,456	\$260,264	\$274,418	\$274,418	\$274,418
Total	\$4,316,753	\$4,477,323	\$5,791,416	\$6,368,241	\$6,368,241	\$6,368,241	\$7,171,864	\$7,573,695	\$7,985,572	\$7,985,572	\$7,985,572
Incremental Revenues to HTRZ											
Utah County	\$1,265,358	\$1,312,425	\$1,697,621	\$1,866,704	\$1,866,704	\$1,866,704	\$2,102,268	\$2,220,056	\$2,340,788	\$2,340,788	\$2,340,788
Multi-County Assessing & Collectinng	\$17,801	\$18,463	\$23,882	\$26,261	\$26,261	\$26,261	\$29,575	\$31,232	\$32,930	\$32,930	\$32,930
County Assessing & Collecting	\$210,646	\$218,481	\$282,605	\$310,753	\$310,753	\$310,753	\$349,967	\$369,576	\$389,674	\$389,674	\$389,674
Alpine School District	\$10,241,534	\$10,622,488	\$13,740,185	\$15,108,706	\$15,108,706	\$15,108,706	\$17,015,309	\$17,968,657	\$18,945,839	\$18,945,839	\$18,945,839
Vineyard Town	\$4,938,306	\$5,121,996	\$6,625,301	\$7,285,180	\$7,285,180	\$7,285,180	\$8,204,514	\$8,664,203	\$9,135,385	\$9,135,385	\$9,135,385
Central Utah Water Conservancy District	\$593,368	\$615,440	\$796,071	\$875,360	\$875,360	\$875,360	\$985,823	\$1,041,058	\$1,097,673	\$1,097,673	\$1,097,673
Total	\$17,267,013	\$17,909,293	\$23,165,665	\$25,472,963	\$25,472,963	\$25,472,963	\$28,687,456	\$30,294,781	\$31,942,289	\$31,942,289	\$31,942,289
SALES TAX CALCULATIONS											
Gross Sales	\$245,322,627	\$250,229,080	\$255,233,661	\$267,129,769	\$272,472,365	\$277,921,812	\$283,480,248	\$289,149,853	\$294,932,850	\$300,831,507	\$306,848,137
Sales Tax Revenues											
State of Utah	\$11,898,147	\$12,136,110	\$12,378,833	\$12,955,794	\$13,214,910	\$13,479,208	\$13,748,792	\$14,023,768	\$14,304,243	\$14,590,328	\$14,882,135
Vineyard Local Option	\$2,453,226	\$2,502,291	\$2,552,337	\$2,671,298	\$2,724,724	\$2,779,218	\$2,834,802	\$2,891,499	\$2,949,329	\$3,008,315	\$3,068,481
County Local Option	\$613,307	\$625,573	\$638,084	\$667,824	\$681,181	\$694,805	\$708,701	\$722,875	\$737,332	\$752,079	\$767,120

Years	8	9	10	11	12	13	14	15	16	17	18
	10	11	12	13	14	15	16	17	18	19	20
Mass Transit	\$613,307	\$625,573	\$638,084	\$667,824	\$681,181	\$694,805	\$708,701	\$722,875	\$737,332	\$752,079	\$767,120
Mass Transit Fixed Guideway	\$735,968	\$750,687	\$765,701	\$801,389	\$817,417	\$833,765	\$850,441	\$867,450	\$884,799	\$902,495	\$920,544
County Airport, Highway, Public Transit	\$613,307	\$625,573	\$638,084	\$667,824	\$681,181	\$694,805	\$708,701	\$722,875	\$737,332	\$752,079	\$767,120
Transportation Infrastructure	\$613,307	\$625,573	\$638,084	\$667,824	\$681,181	\$694,805	\$708,701	\$722,875	\$737,332	\$752,079	\$767,120
Cultural Arts & Zoo	\$245,323	\$250,229	\$255,234	\$267,130	\$272,472	\$277,922	\$283,480	\$289,150	\$294,933	\$300,832	\$306,848
TOTAL Sales Tax Revenues	\$17,785,890	\$18,141,608	\$18,504,440	\$19,366,908	\$19,754,246	\$20,149,331	\$20,552,318	\$20,963,364	\$21,382,632	\$21,810,284	\$22,246,490
Amount of State Revenues to TTIF	\$1,784,722	\$1,820,417	\$1,856,825	\$1,943,369	\$1,982,236	\$2,021,881	\$2,062,319	\$2,103,565	\$2,145,636	\$2,188,549	\$2,232,320

APPENDIX A

Years	19	20	21	22	23	24	25	26	27	28	
	21	22	23	24	25	26	27	28	29	30	
Incremental Taxable Value	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,334,533,030	\$3,170,677,761
TOTAL Assessed Value	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,430,228,637	\$3,334,533,030	\$3,170,677,761

100% of Incremental Value

Utah County	\$2,925,985	\$2,925,985	\$2,925,985	\$2,925,985	\$2,925,985	\$2,925,985	\$2,925,985	\$2,925,985	\$2,844,357	\$2,704,588
Multi-County Assessing & Collectinng	\$41,163	\$41,163	\$41,163	\$41,163	\$41,163	\$41,163	\$41,163	\$41,163	\$40,014	\$38,048
County Assessing & Collecting	\$487,092	\$487,092	\$487,092	\$487,092	\$487,092	\$487,092	\$487,092	\$487,092	\$473,504	\$450,236
Alpine School District	\$23,682,299	\$23,682,299	\$23,682,299	\$23,682,299	\$23,682,299	\$23,682,299	\$23,682,299	\$23,682,299	\$23,021,616	\$21,890,359
Vineyard Town	\$11,419,231	\$11,419,231	\$11,419,231	\$11,419,231	\$11,419,231	\$11,419,231	\$11,419,231	\$11,419,231	\$11,100,660	\$10,555,186
Central Utah Water Conservancy District	\$1,372,091	\$1,372,091	\$1,372,091	\$1,372,091	\$1,372,091	\$1,372,091	\$1,372,091	\$1,372,091	\$1,333,813	\$1,268,271
Total	\$39,927,861	\$39,927,861	\$39,927,861	\$39,927,861	\$39,927,861	\$39,927,861	\$39,927,861	\$39,927,861	\$38,813,964	\$36,906,689

<i>Utah County</i>	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
<i>Multi-County Assessing & Collectinng</i>	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
<i>County Assessing & Collecting</i>	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
<i>Alpine School District</i>	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
<i>Vineyard Town</i>	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
<i>Central Utah Water Conservancy District</i>	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%

Incremental Revenues to Taxing Entities

Utah County	\$585,197	\$585,197	\$585,197	\$585,197	\$585,197	\$585,197	\$585,197	\$585,197	\$568,871	\$540,918
Multi-County Assessing & Collectinng	\$8,233	\$8,233	\$8,233	\$8,233	\$8,233	\$8,233	\$8,233	\$8,233	\$8,003	\$7,610
County Assessing & Collecting	\$97,418	\$97,418	\$97,418	\$97,418	\$97,418	\$97,418	\$97,418	\$97,418	\$94,701	\$90,047
Alpine School District	\$4,736,460	\$4,736,460	\$4,736,460	\$4,736,460	\$4,736,460	\$4,736,460	\$4,736,460	\$4,736,460	\$4,604,323	\$4,378,072
Vineyard Town	\$2,283,846	\$2,283,846	\$2,283,846	\$2,283,846	\$2,283,846	\$2,283,846	\$2,283,846	\$2,283,846	\$2,220,132	\$2,111,037
Central Utah Water Conservancy District	\$274,418	\$274,418	\$274,418	\$274,418	\$274,418	\$274,418	\$274,418	\$274,418	\$266,763	\$253,654
Total	\$7,985,572	\$7,985,572	\$7,985,572	\$7,985,572	\$7,985,572	\$7,985,572	\$7,985,572	\$7,985,572	\$7,762,793	\$7,381,338

Incremental Revenues to HTRZ

Utah County	\$2,340,788	\$2,340,788	\$2,340,788	\$2,340,788	\$2,340,788	\$2,340,788	\$2,340,788	\$2,340,788	\$2,275,485	\$2,163,671
Multi-County Assessing & Collectinng	\$32,930	\$32,930	\$32,930	\$32,930	\$32,930	\$32,930	\$32,930	\$32,930	\$32,012	\$30,439
County Assessing & Collecting	\$389,674	\$389,674	\$389,674	\$389,674	\$389,674	\$389,674	\$389,674	\$389,674	\$378,803	\$360,189
Alpine School District	\$18,945,839	\$18,945,839	\$18,945,839	\$18,945,839	\$18,945,839	\$18,945,839	\$18,945,839	\$18,945,839	\$18,417,293	\$17,512,287
Vineyard Town	\$9,135,385	\$9,135,385	\$9,135,385	\$9,135,385	\$9,135,385	\$9,135,385	\$9,135,385	\$9,135,385	\$8,880,528	\$8,444,149
Central Utah Water Conservancy District	\$1,097,673	\$1,097,673	\$1,097,673	\$1,097,673	\$1,097,673	\$1,097,673	\$1,097,673	\$1,097,673	\$1,067,051	\$1,014,617
Total	\$31,942,289	\$31,942,289	\$31,942,289	\$31,942,289	\$31,942,289	\$31,942,289	\$31,942,289	\$31,942,289	\$31,051,172	\$29,525,351

SALES TAX CALCULATIONS

Gross Sales	\$312,985,100	\$319,244,802	\$325,629,698	\$332,142,292	\$338,785,138	\$345,560,841	\$352,472,057	\$359,521,499	\$366,711,929	\$374,046,167
Sales Tax Revenues										
State of Utah	\$15,179,777	\$15,483,373	\$15,793,040	\$16,108,901	\$16,431,079	\$16,759,701	\$17,094,895	\$17,436,793	\$17,785,529	\$18,141,239
Vineyard Local Option	\$3,129,851	\$3,192,448	\$3,256,297	\$3,321,423	\$3,387,851	\$3,455,608	\$3,524,721	\$3,595,215	\$3,667,119	\$3,740,462
County Local Option	\$782,463	\$798,112	\$814,074	\$830,356	\$846,963	\$863,902	\$881,180	\$898,804	\$916,780	\$935,115

Years	19	20	21	22	23	24	25	26	27	28
	21	22	23	24	25	26	27	28	29	30
Mass Transit	\$782,463	\$798,112	\$814,074	\$830,356	\$846,963	\$863,902	\$881,180	\$898,804	\$916,780	\$935,115
Mass Transit Fixed Guideway	\$938,955	\$957,734	\$976,889	\$996,427	\$1,016,355	\$1,036,683	\$1,057,416	\$1,078,564	\$1,100,136	\$1,122,139
County Airport, Highway, Public Transit	\$782,463	\$798,112	\$814,074	\$830,356	\$846,963	\$863,902	\$881,180	\$898,804	\$916,780	\$935,115
Transportation Infrastructure	\$782,463	\$798,112	\$814,074	\$830,356	\$846,963	\$863,902	\$881,180	\$898,804	\$916,780	\$935,115
Cultural Arts & Zoo	\$312,985	\$319,245	\$325,630	\$332,142	\$338,785	\$345,561	\$352,472	\$359,521	\$366,712	\$374,046
TOTAL Sales Tax Revenues	\$22,691,420	\$23,145,248	\$23,608,153	\$24,080,316	\$24,561,922	\$25,053,161	\$25,554,224	\$26,065,309	\$26,586,615	\$27,118,347
Amount of State Revenues to TTIF	\$2,276,967	\$2,322,506	\$2,368,956	\$2,416,335	\$2,464,662	\$2,513,955	\$2,564,234	\$2,615,519	\$2,667,829	\$2,721,186

APPENDIX A									
Years	29	30	31	32	33	34	35	36	37
	31	32	33	34	35	36	37	38	39
Incremental Taxable Value	\$2,936,623,585	\$2,604,340,112	\$2,336,981,166	\$2,037,597,893	\$1,575,953,201	\$1,506,979,811	\$942,506,841	\$694,730,048	\$694,730,048
TOTAL Assessed Value	\$2,936,623,585	\$2,604,340,112	\$2,336,981,166	\$2,037,597,893	\$1,575,953,201	\$1,506,979,811	\$942,506,841	\$694,730,048	\$694,730,048
100% of Incremental Value									
Utah County	\$2,504,940	\$2,221,502	\$1,993,445	\$1,738,071	\$1,344,288	\$1,285,454	\$803,958	\$592,605	\$592,605
Multi-County Assessing & Collectinng	\$35,239	\$31,252	\$28,044	\$24,451	\$18,911	\$18,084	\$11,310	\$8,337	\$8,337
County Assessing & Collecting	\$417,001	\$369,816	\$331,851	\$289,339	\$223,785	\$213,991	\$133,836	\$98,652	\$98,652
Alpine School District	\$20,274,449	\$17,980,364	\$16,134,518	\$14,067,576	\$10,880,381	\$10,404,189	\$6,507,067	\$4,796,416	\$4,796,416
Vineyard Town	\$9,776,020	\$8,669,848	\$7,779,810	\$6,783,163	\$5,246,348	\$5,016,736	\$3,137,605	\$2,312,756	\$2,312,756
Central Utah Water Conservancy District	\$1,174,649	\$1,041,736	\$934,792	\$815,039	\$630,381	\$602,792	\$377,003	\$277,892	\$277,892
Total	\$34,182,299	\$30,314,519	\$27,202,461	\$23,717,639	\$18,344,095	\$17,541,245	\$10,970,780	\$8,086,658	\$8,086,658
<i>Utah County</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Multi-County Assessing & Collectinng</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>County Assessing & Collecting</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Alpine School District</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Vineyard Town</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Central Utah Water Conservancy District</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
Incremental Revenues to Taxing Entities									
Utah County	\$500,988	\$444,300	\$398,689	\$347,614	\$268,858	\$257,091	\$160,792	\$118,521	\$118,521
Multi-County Assessing & Collectinng	\$7,048	\$6,250	\$5,609	\$4,890	\$3,782	\$3,617	\$2,262	\$1,667	\$1,667
County Assessing & Collecting	\$83,400	\$73,963	\$66,370	\$57,868	\$44,757	\$42,798	\$26,767	\$19,730	\$19,730
Alpine School District	\$4,054,890	\$3,596,073	\$3,226,904	\$2,813,515	\$2,176,076	\$2,080,838	\$1,301,413	\$959,283	\$959,283
Vineyard Town	\$1,955,204	\$1,733,970	\$1,555,962	\$1,356,633	\$1,049,270	\$1,003,347	\$627,521	\$462,551	\$462,551
Central Utah Water Conservancy District	\$234,930	\$208,347	\$186,958	\$163,008	\$126,076	\$120,558	\$75,401	\$55,578	\$55,578
Total	\$6,836,460	\$6,062,904	\$5,440,492	\$4,743,528	\$3,668,819	\$3,508,249	\$2,194,156	\$1,617,332	\$1,617,332
Incremental Revenues to HTRZ									
Utah County	\$2,003,952	\$1,777,202	\$1,594,756	\$1,390,457	\$1,075,430	\$1,028,363	\$643,167	\$474,084	\$474,084
Multi-County Assessing & Collectinng	\$28,192	\$25,002	\$22,435	\$19,561	\$15,129	\$14,467	\$9,048	\$6,669	\$6,669
County Assessing & Collecting	\$333,600	\$295,853	\$265,481	\$231,471	\$179,028	\$171,193	\$107,069	\$78,921	\$78,921
Alpine School District	\$16,219,559	\$14,384,291	\$12,907,614	\$11,254,061	\$8,704,305	\$8,323,351	\$5,205,654	\$3,837,133	\$3,837,133
Vineyard Town	\$7,820,816	\$6,935,879	\$6,223,848	\$5,426,531	\$4,197,079	\$4,013,389	\$2,510,084	\$1,850,205	\$1,850,205
Central Utah Water Conservancy District	\$939,720	\$833,389	\$747,834	\$652,031	\$504,305	\$482,234	\$301,602	\$222,314	\$222,314
Total	\$27,345,839	\$24,251,615	\$21,761,969	\$18,974,112	\$14,675,276	\$14,032,996	\$8,776,624	\$6,469,326	\$6,469,326
SALES TAX CALCULATIONS									
Gross Sales	\$381,527,090	\$389,157,632	\$396,940,785	\$404,879,601	\$412,977,193	\$421,236,736	\$429,661,471	\$438,254,701	\$447,019,795
Sales Tax Revenues									
State of Utah	\$18,504,064	\$18,874,145	\$19,251,628	\$19,636,661	\$20,029,394	\$20,429,982	\$20,838,581	\$21,255,353	\$21,680,460
Vineyard Local Option	\$3,815,271	\$3,891,576	\$3,969,408	\$4,048,796	\$4,129,772	\$4,212,367	\$4,296,615	\$4,382,547	\$4,470,198
County Local Option	\$953,818	\$972,894	\$992,352	\$1,012,199	\$1,032,443	\$1,053,092	\$1,074,154	\$1,095,637	\$1,117,549

Years	29	30	31	32	33	34	35	36	37
	31	32	33	34	35	36	37	38	39
Mass Transit	\$953,818	\$972,894	\$992,352	\$1,012,199	\$1,032,443	\$1,053,092	\$1,074,154	\$1,095,637	\$1,117,549
Mass Transit Fixed Guideway	\$1,144,581	\$1,167,473	\$1,190,822	\$1,214,639	\$1,238,932	\$1,263,710	\$1,288,984	\$1,314,764	\$1,341,059
County Airport, Highway, Public Transit	\$953,818	\$972,894	\$992,352	\$1,012,199	\$1,032,443	\$1,053,092	\$1,074,154	\$1,095,637	\$1,117,549
Transportation Infrastructure	\$953,818	\$972,894	\$992,352	\$1,012,199	\$1,032,443	\$1,053,092	\$1,074,154	\$1,095,637	\$1,117,549
Cultural Arts & Zoo	\$381,527	\$389,158	\$396,941	\$404,880	\$412,977	\$421,237	\$429,661	\$438,255	\$447,020
TOTAL Sales Tax Revenues	\$27,660,714	\$28,213,928	\$28,778,207	\$29,353,771	\$29,940,846	\$30,539,663	\$31,150,457	\$31,773,466	\$32,408,935
Amount of State Revenues to TTIF	\$2,775,610	\$2,831,122	\$2,887,744	\$2,945,499	\$3,004,409	\$3,064,497	\$3,125,787	\$3,188,303	\$3,252,069

APPENDIX A

Years	38	39	40
	40	41	42
Incremental Taxable Value	\$694,730,048	\$349,531,066	\$176,923,132
TOTAL Assessed Value	\$694,730,048	\$349,531,066	\$176,923,132

100% of Incremental Value

Utah County	\$592,605	\$298,150	\$150,915
Multi-County Assessing & Collectinng	\$8,337	\$4,194	\$2,123
County Assessing & Collecting	\$98,652	\$49,633	\$25,123
Alpine School District	\$4,796,416	\$2,413,162	\$1,221,477
Vineyard Town	\$2,312,756	\$1,163,589	\$588,977
Central Utah Water Conservancy District	\$277,892	\$139,812	\$70,769
Total	\$8,086,658	\$4,068,542	\$2,059,385

<i>Utah County</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Multi-County Assessing & Collectinng</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>County Assessing & Collecting</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Alpine School District</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Vineyard Town</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>
<i>Central Utah Water Conservancy District</i>	<i>80%</i>	<i>80%</i>	<i>80%</i>

Incremental Revenues to Taxing Entities

Utah County	\$118,521	\$59,630	\$30,183
Multi-County Assessing & Collectinng	\$1,667	\$839	\$425
County Assessing & Collecting	\$19,730	\$9,927	\$5,025
Alpine School District	\$959,283	\$482,632	\$244,295
Vineyard Town	\$462,551	\$232,718	\$117,795
Central Utah Water Conservancy District	\$55,578	\$27,962	\$14,154
Total	\$1,617,332	\$813,708	\$411,877

Incremental Revenues to HTRZ

Utah County	\$474,084	\$238,520	\$120,732
Multi-County Assessing & Collectinng	\$6,669	\$3,355	\$1,698
County Assessing & Collecting	\$78,921	\$39,707	\$20,098
Alpine School District	\$3,837,133	\$1,930,530	\$977,182
Vineyard Town	\$1,850,205	\$930,871	\$471,182
Central Utah Water Conservancy District	\$222,314	\$111,850	\$56,615
Total	\$6,469,326	\$3,254,833	\$1,647,508

SALES TAX CALCULATIONS

Gross Sales	\$455,960,191	\$465,079,394	\$474,380,982
Sales Tax Revenues			
State of Utah	\$22,114,069	\$22,556,351	\$23,007,478
Vineyard Local Option	\$4,559,602	\$4,650,794	\$4,743,810
County Local Option	\$1,139,900	\$1,162,698	\$1,185,952

Years	38	39	40
	40	41	42
Mass Transit	\$1,139,900	\$1,162,698	\$1,185,952
Mass Transit Fixed Guideway	\$1,367,881	\$1,395,238	\$1,423,143
County Airport, Highway, Public Transit	\$1,139,900	\$1,162,698	\$1,185,952
Transportation Infrastructure	\$1,139,900	\$1,162,698	\$1,185,952
Cultural Arts & Zoo	\$455,960	\$465,079	\$474,381
TOTAL Sales Tax Revenues	\$33,057,114	\$33,718,256	\$34,392,621
Amount of State Revenues to TTIF	\$3,317,110	\$3,383,453	\$3,451,122