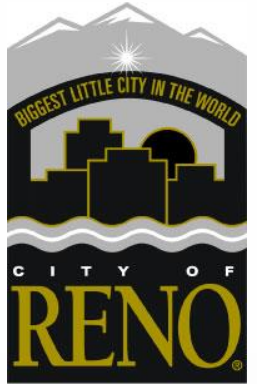


# VACANT LANDS STUDY (2021)

Prepared by:



# SPONSORS (CONT.)



HAWCO PROPERTIES



# Purpose & Focus of the Study

- **Focus:** Estimate the remaining supply of vacant commercial & residential land in Northern Nevada (“No. NV”) within EDAWN’s service area (“the Region”) to gauge if a potential scarcity exists.
- **Purpose:** This study is a policy making tool & resource for local, state & national elected officials, & community organizations.

# Methodology: Filtering

Our results will be based on a series of filters applied to Washoe, Storey & Lyon County parcels:

- ✓ *Filter 1: Keep only undeveloped parcels*
- ✓ *Filter 2: Keep only parcels of 20+ acres*
- ✓ *Filter 3: Keep only parcels with a slope of 12% or less (commercial less than or equal to 7%)*
- ✓ *Filter 4: Remove parcels too far from urban centers (i.e., outside the EDAWN boundary)*
- ✓ *Filter 5: Remove parcels that are tribal lands or are owned by USA outside disposal boundary*
- ✓ *Filter 6: Remove “oddly” shaped parcels*
- ✓ *Filter 7: Keep parcels with commercial, industrial & residential Land Use Codes (LUCs)*
- ✓ *Filter 8: Remove parcels more than 1 mile from a road*
- ✓ *Filter 9: Remove parcels where more than 50% of the parcel has a slope greater than 12%*

# Parcel Assemblages

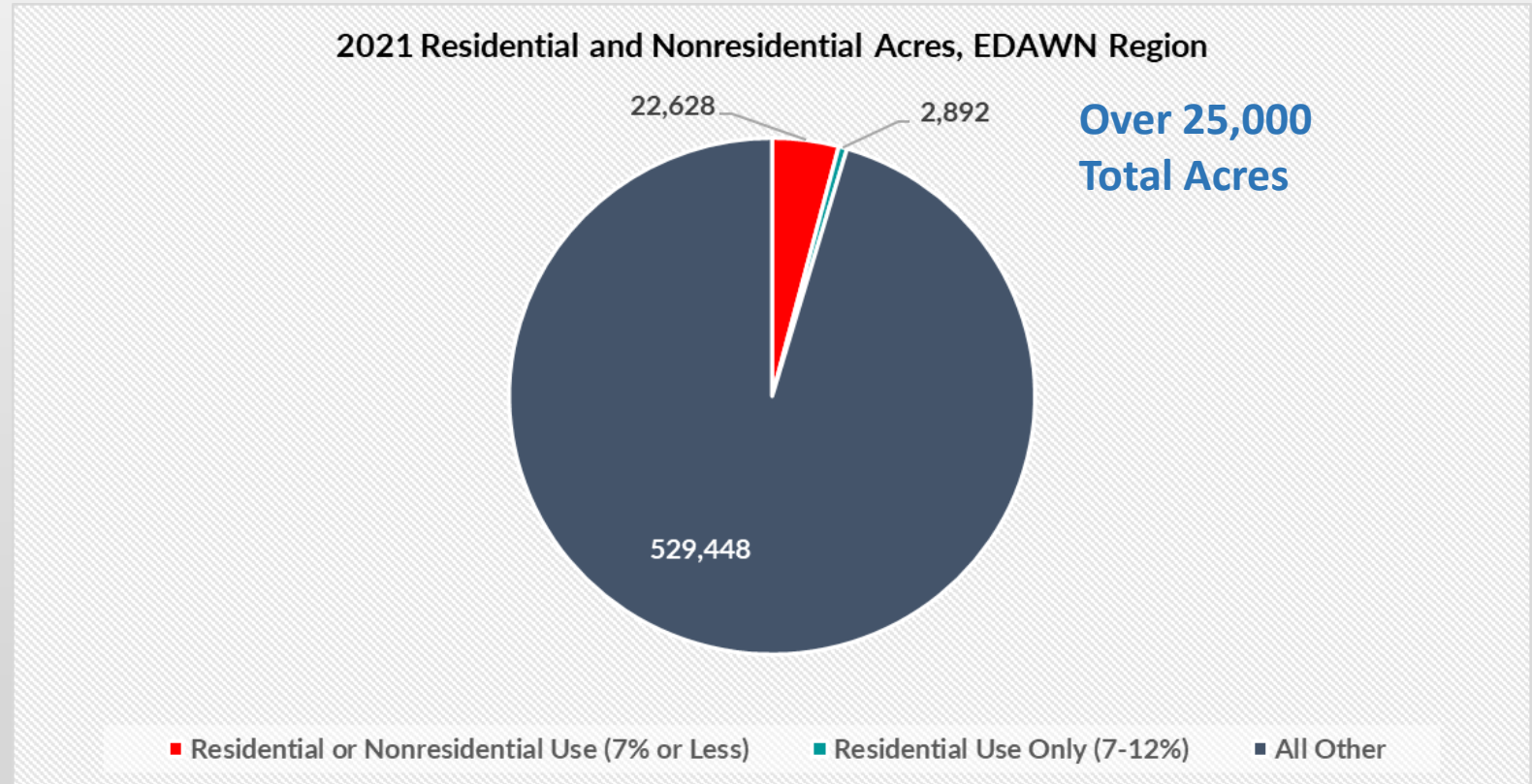
RCG has not made assumptions about assembling multiple parcels into a developable larger parcel:

- Consistent with RCG's methodology for the Southern Nevada Industrial Land Analysis
- Working group of NAIOP members noted difficulty and speculative nature of the assemblage process (incl. matching buyers with sellers)
- Not readily apparent which parcels are adjacent given the assessors' numbering conventions
- May be assemblages of two or more parcels in the Study Area which, together, sum to 20 or more developable acres that have been excluded from the present analysis.

# 2021 Vacant, Developable, Non-Federal Land 7% & 12% Slope

Within the EDAWN boundary, there are currently:

- ❑ Almost 22,700 vacant acres with slope of 7% or less, i.e., suitable for residential or nonresidential development
- ❑ Almost 3,000 vacant additional acres that are suitable for residential development (7-12% grade)
- ❑ Almost 530,000 other acres (e.g., not vacant, not usable, grade is too steep)

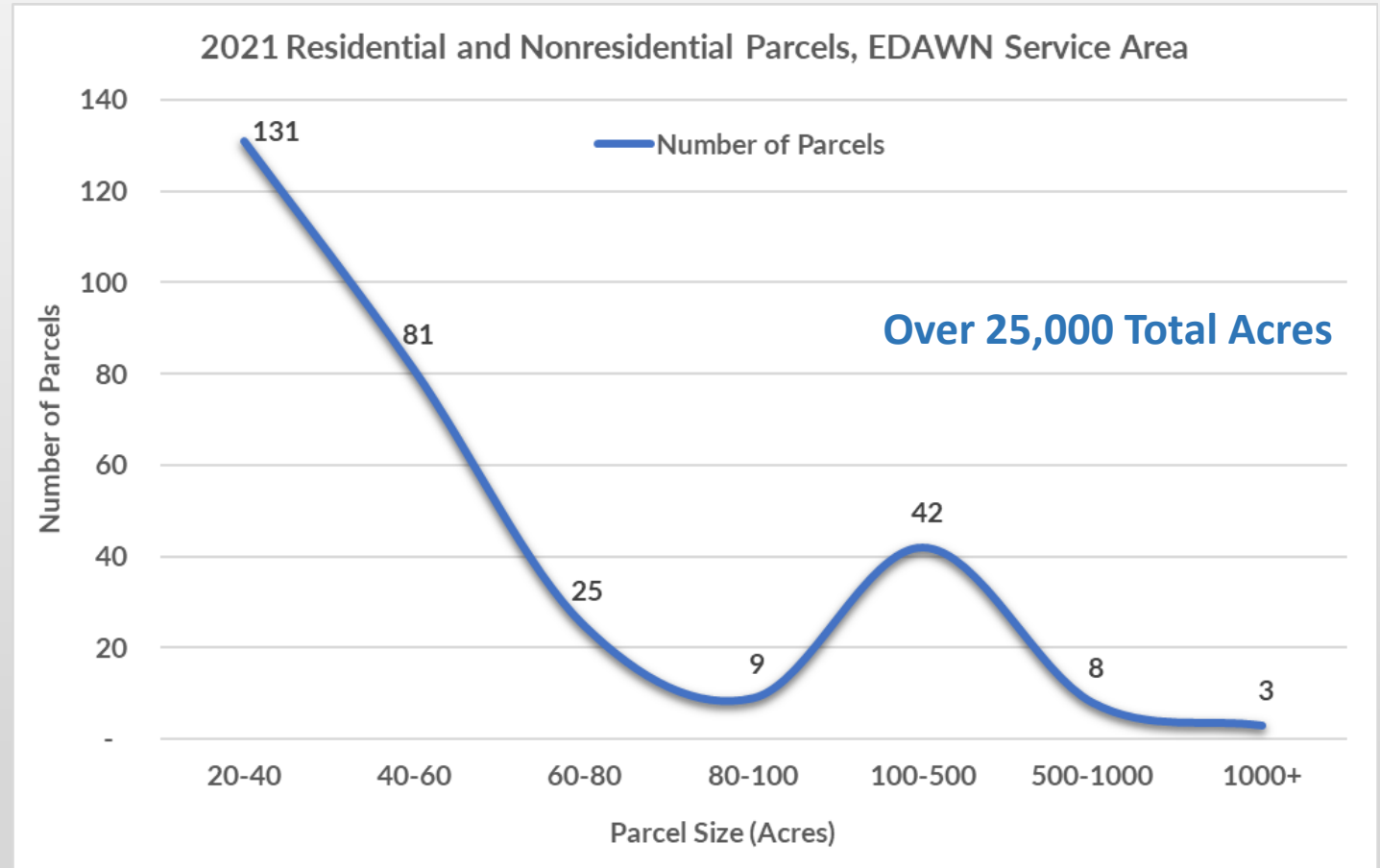


Source: Truckee Meadows Regional Planning Agency

# 2021 Vacant, Developable, Non-Federal Land 7% & 12% Slope

Examining these residential & nonresidential parcels more closely:

- ❑ The vast majority are small—between 20 & 60 acres
- ❑ 42 parcels are between 100 & 500 acres each
- ❑ Only 3 parcels are 1,000+ acres



Source: Truckee Meadows Regional Planning Agency

Note: Removing state- & municipally-owned parcels makes little difference in the number of parcels available

# 2021 Vacant, Developable, Non-Federal Land 7% & 12% Slope

This table provides further detail on the 42 parcels that are between 100 & 500 acres each.

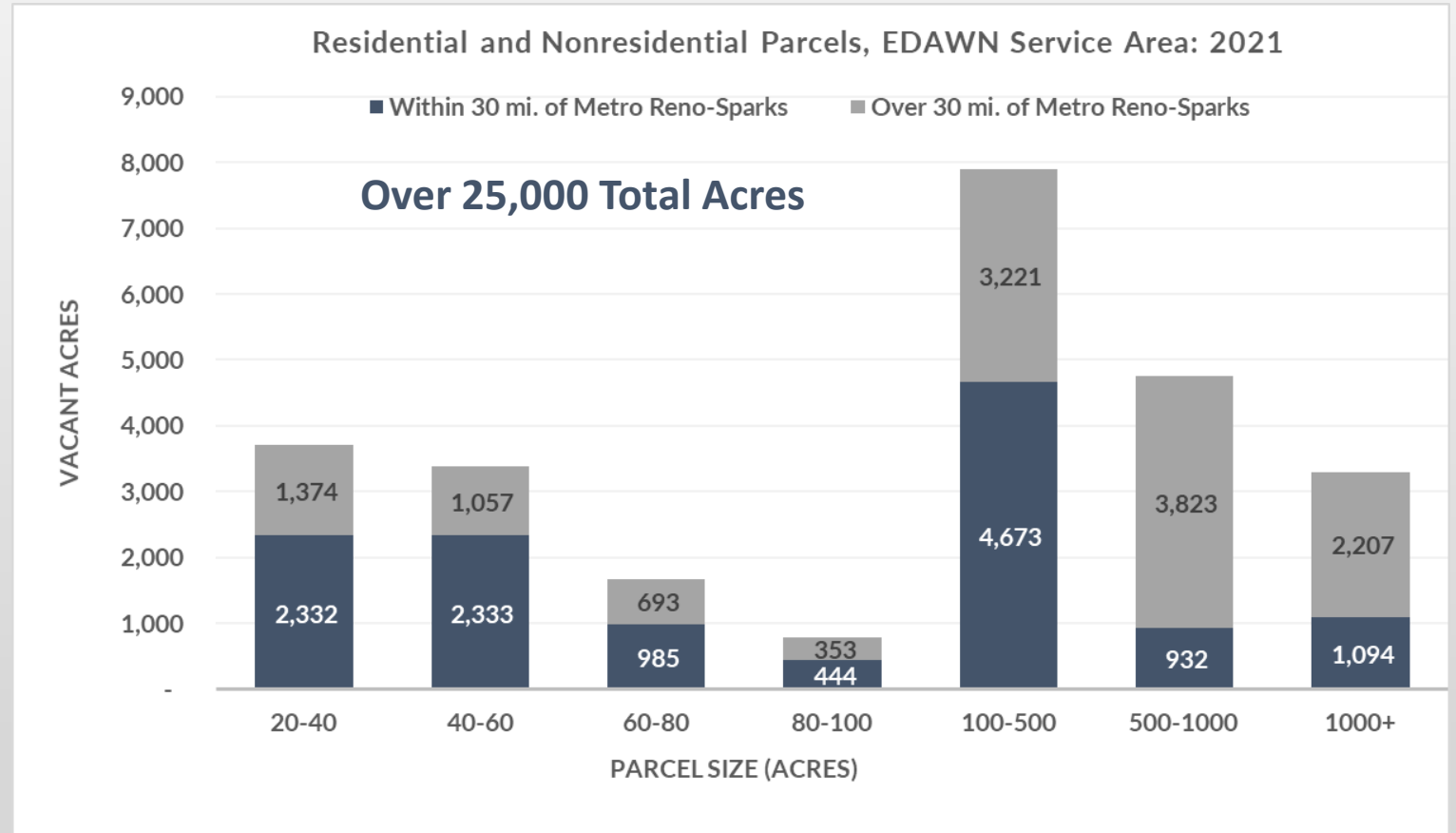
County	Number of Parcels	Acres
Washoe	19	4,212
Storey	6	1,076
Lyon	17	3,336
Total	42	8,624



# 2021 Vacant, Developable, Non-Federal Land 7% & 12% Slope

Examining these residential & nonresidential parcels more closely:

- ❑ The 100 to 500-acre parcels account for almost 8,000 acres
- ❑ The 501 to 1,000-acre parcels account for over 4,750 acres
- ❑ The 1,000+-acre parcels account for over 3,300 acres
- ❑ These 3 groups represent 65% of all the acres
- ❑ The bulk of the parcels 500 acres & larger are over 30 mi. from Metro Reno-Sparks



Source: Truckee Meadows Regional Planning Agency

Note: Removing state- & municipally-owned parcels makes little difference in acreage available

# Methodology: Site Rankings

To evaluate the usability of the parcels, RCG uses the following scoring methodology:

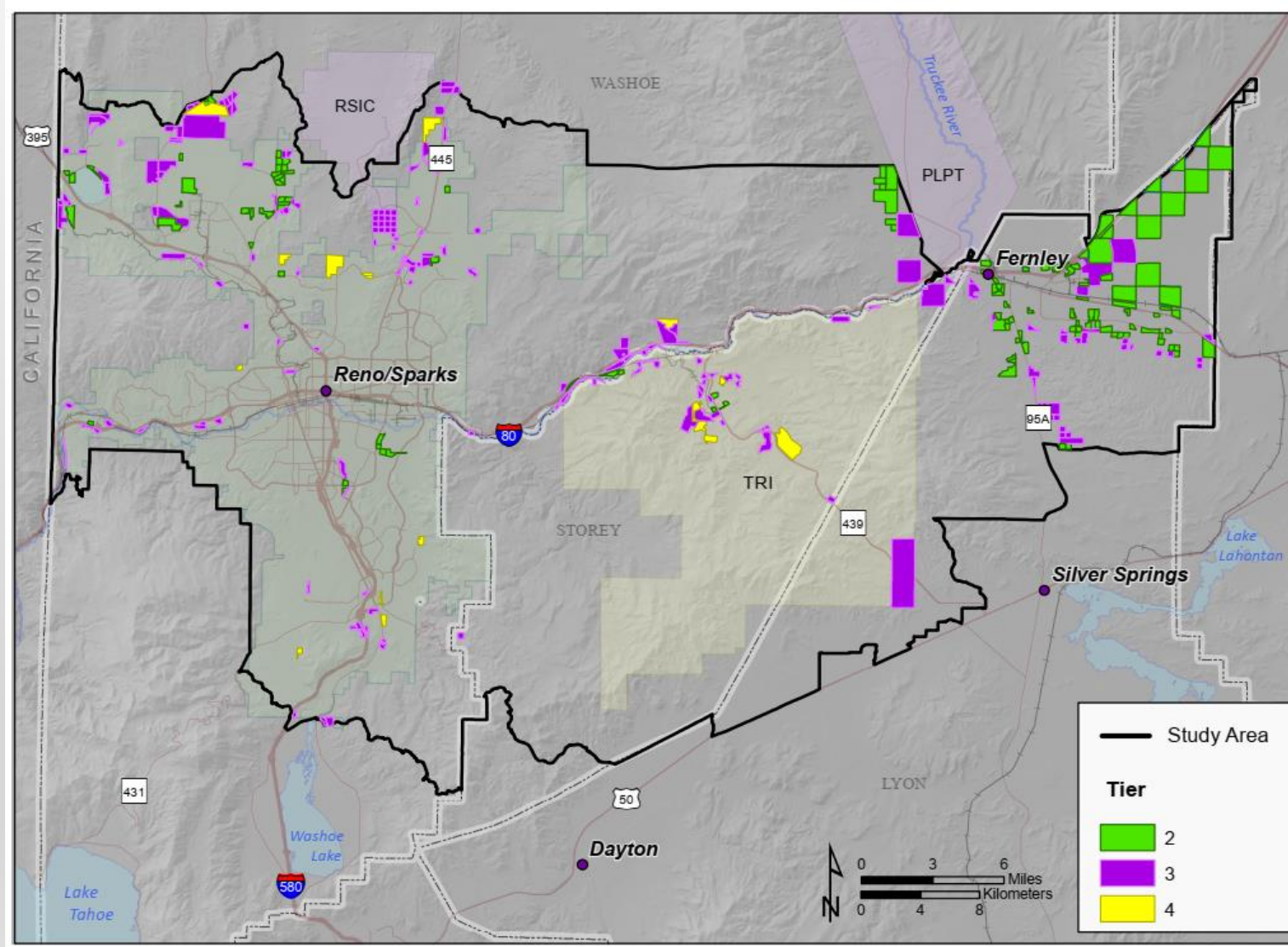
- 10 ranking criteria, 20 possible points (2 points each)
- Point scale based on input from industry experts & data clustering
- 4 parcel tiers
  - ✓ Tier 1: 16 – 20 points (most desirable)
  - ✓ Tier 2 : 11 - 15 points
  - ✓ Tier 3 : 6 – 10 points
  - ✓ Tier 4 : 0 - 5 points (least desirable)

Rank Criteria	0 Points	1 Point	2 Points
Zoning	Other/Unknown	Office/Retail	Industrial/ Residential
Average Slope	Greater than 3.5%	N/A	Less than or equal to 3.5%
Owner	Federal Gov't (not counted)	State/Municipal	Privately-Owned
Acres Over 7% Slope Residential/ Nonresidential	Greater than 2 Acres	0.5 - 2 Acres	Less than or equal to 0.5 Acres
Acres Over 12% Slope-Residential	Greater than 2 Acres	0.5 - 2 Acres	Less than or equal to 0.5 Acres
Assessed Value Per Acre	Greater than \$100,000	\$50,000 - \$100,000	Less than or equal to \$50,000
Distance to interstate	Greater than 5,280 feet	1,320 - 5,280 feet	Less than or equal to 1,320 feet
Distance to highway	Greater than 2,640 feet	250 - 2,640 feet	Less than or equal to 250 feet
Distance to railroad	Greater than 5,280 feet	250 - 5,280 feet	Less than or equal to 250 feet
Distance from Metro Reno-Sparks (I-80/I- 580 Interchange)	Greater than 30 miles	N/A	Less than 30 miles

# EDAWN Service Area Showing Tiers and Vacant Parcels: 12% or Less

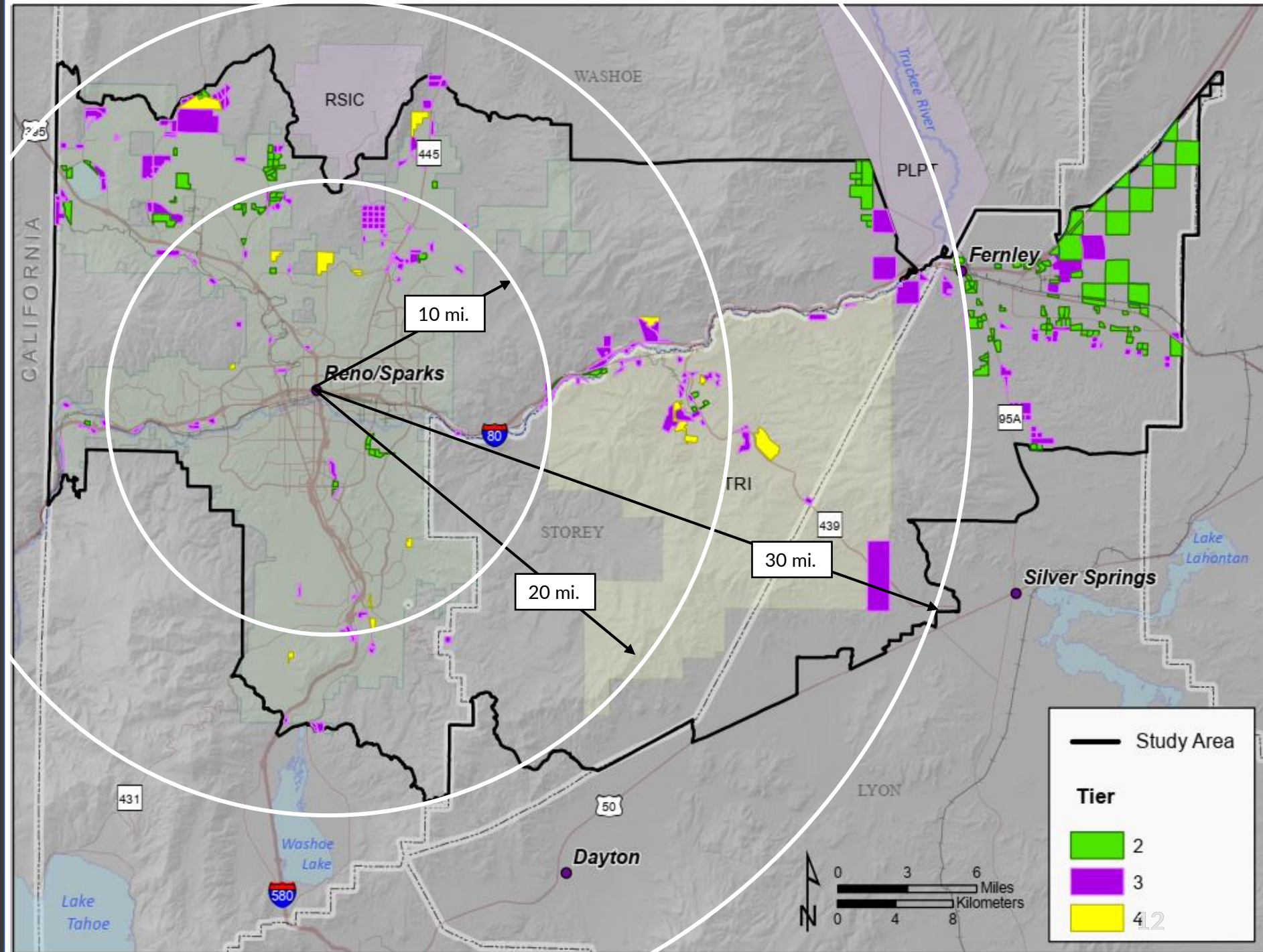
Source: Truckee Meadows Regional Planning Agency

Note: No Tier 1  
Parcels Remain





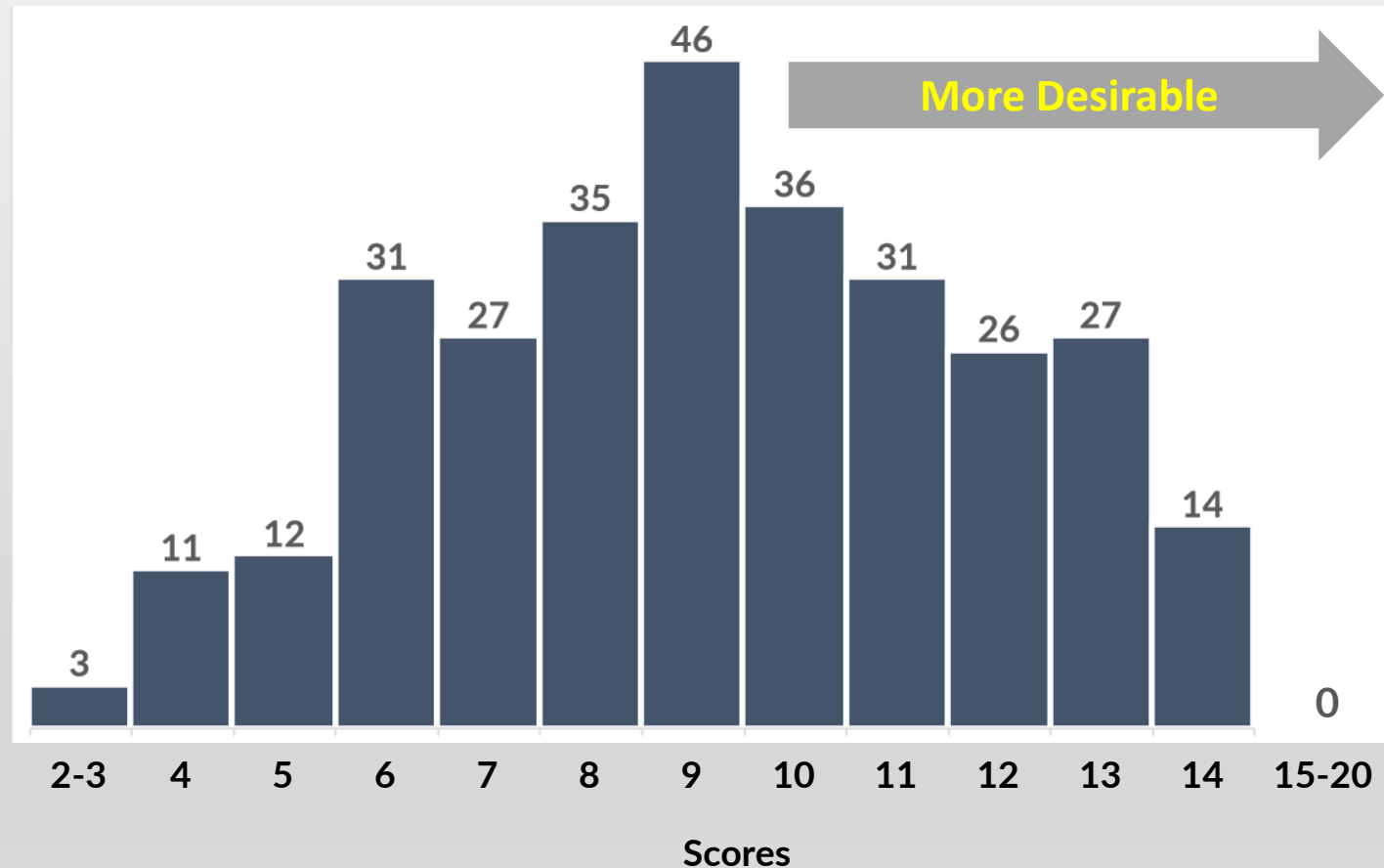
EDAWN Service  
Area: 10-, 20- &  
30-Mile Radius  
from Downtown  
Reno (Note: No  
Tier 1 Parcels  
Remain)



# Parcel Scoring: 7% & 12% Slope

Results of the scoring are as follows:

- ☐ No parcel received a score above 14 points
- ☐ The average parcel score is 9.2 out of 20 possible points
- ☐ The 180 parcels with scores of 9 or better represent over 14,350 acres



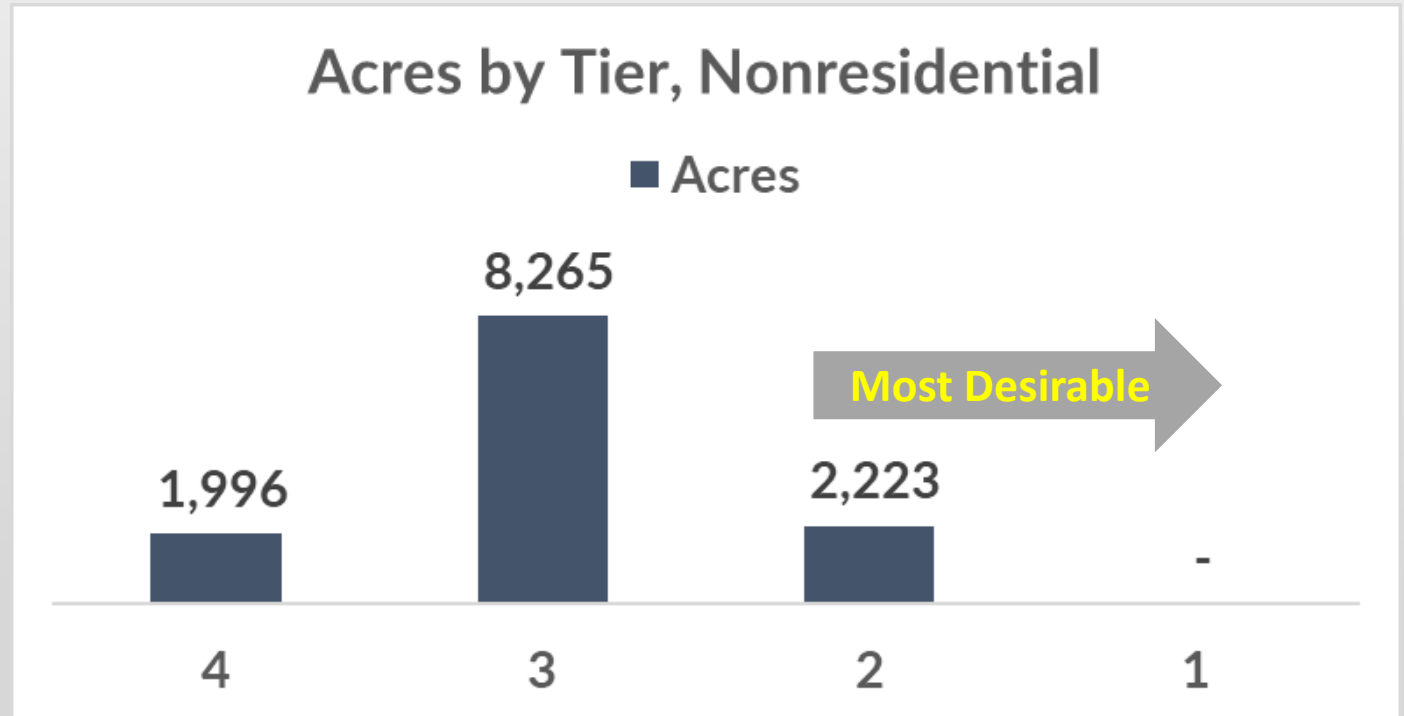
Source: Truckee Meadows Regional Planning Agency

# Parcel Tiers by Number & Acres: 7% Grade or Less (Nonresidential Zoning)

Examining the tiers in detail:

- ❑ No parcels ranked Tier 1. Tier 1 parcels have 16-20 points across the 10 ranking criteria
- ❑ 36 parcels ranked Tier 2, with 11-15 points
- ❑ 100 parcels ranked Tier 3, with 6-10 points
- ❑ 24 parcels ranked Tier 4, with 0-5 points
- ❑ About 2,223 acres in Tier 2 parcels

Total = 12,484 acres. Tier 2 & 3 represent 84% of total (10,488 acres)



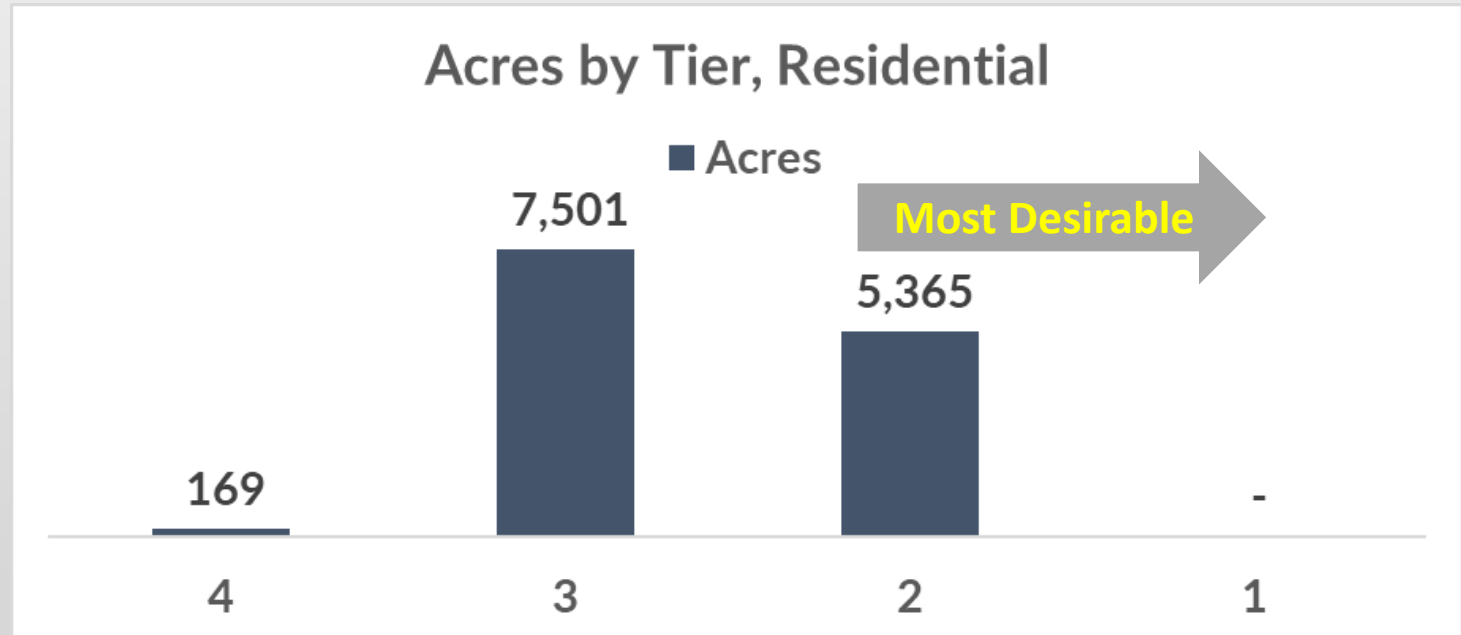
Source: Truckee Meadows Regional Planning Agency

# Parcel Tiers by Number & Acres: Less Than 12% Grade (Residential)

Examining the tiers in detail:

- ❑ 0 parcels ranked Tier 1, with 16-20 points
- ❑ 62 parcels ranked Tier 2, with 11-15 points
- ❑ 75 parcels ranked Tier 3, with 6-10 points
- ❑ 2 residentially-zoned parcels are Tier 4, 0-5 points
- ❑ Over 5,300 acres in Tier 1 & Tier 2 parcels
- ❑ Tier 3 housing would likely lean toward more expensive, high-density units (townhomes, condos, custom homes, etc.)

Total = 13,035 acres. Tier 2 & 3 represent 99% of total (12,867 acres)

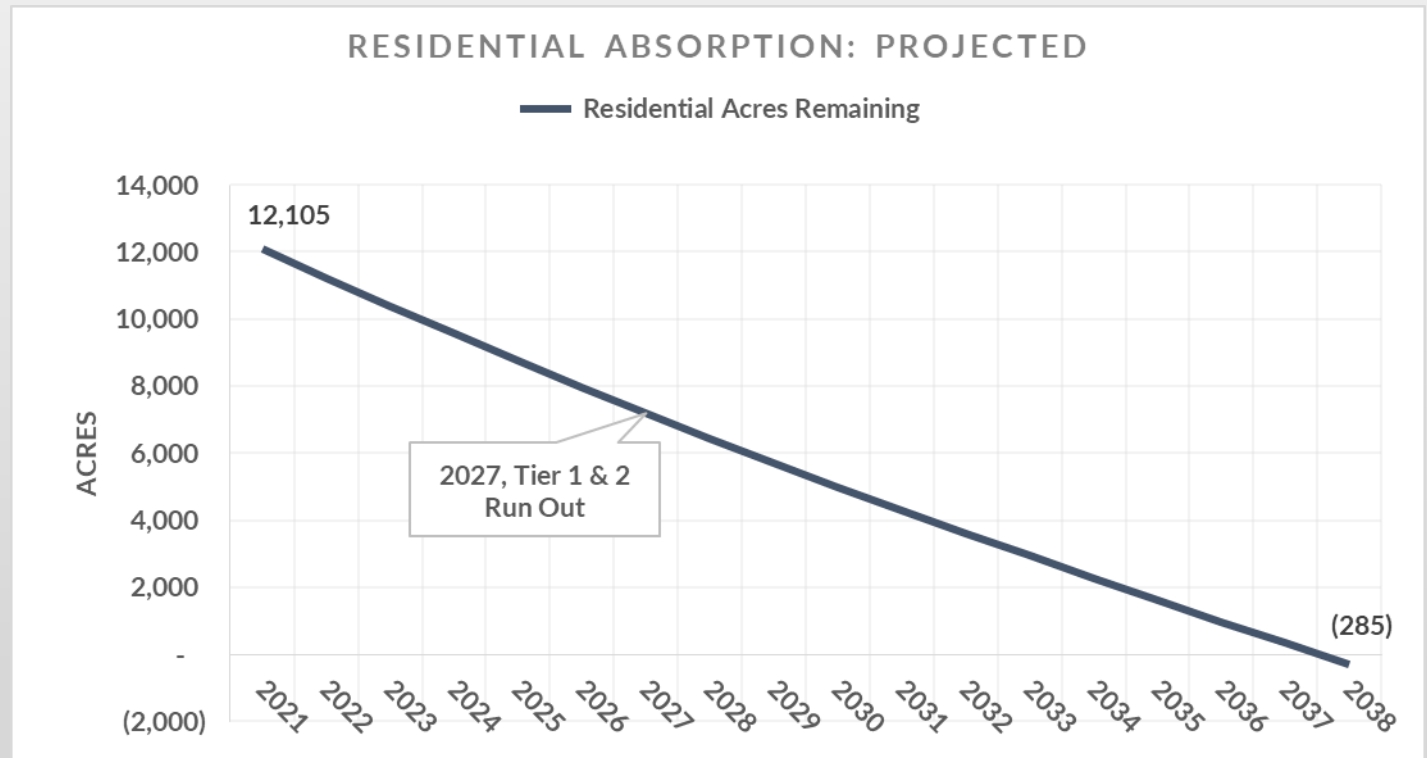


Source: Truckee Meadows Regional Planning Agency

# Acreage Absorption Forecast: Residential (12% or Less), All Tiers

Using Woods & Poole's historical & forecast data of household growth for the MSA, RCG projects that:

- ❑ The Region will run out of developable residential land by 2038 (17 years) at the latest.
- ❑ Tier 2 acres will run out by 2027 (6 years; Tier 1 is already absorbed)
- ❑ In reality, as the Region's supply shortage approaches 2038, "greenfield" development will largely be replaced by redevelopment.
- ❑ Note: Woods & Poole's projections are for the MSA, not the EDawn Region.

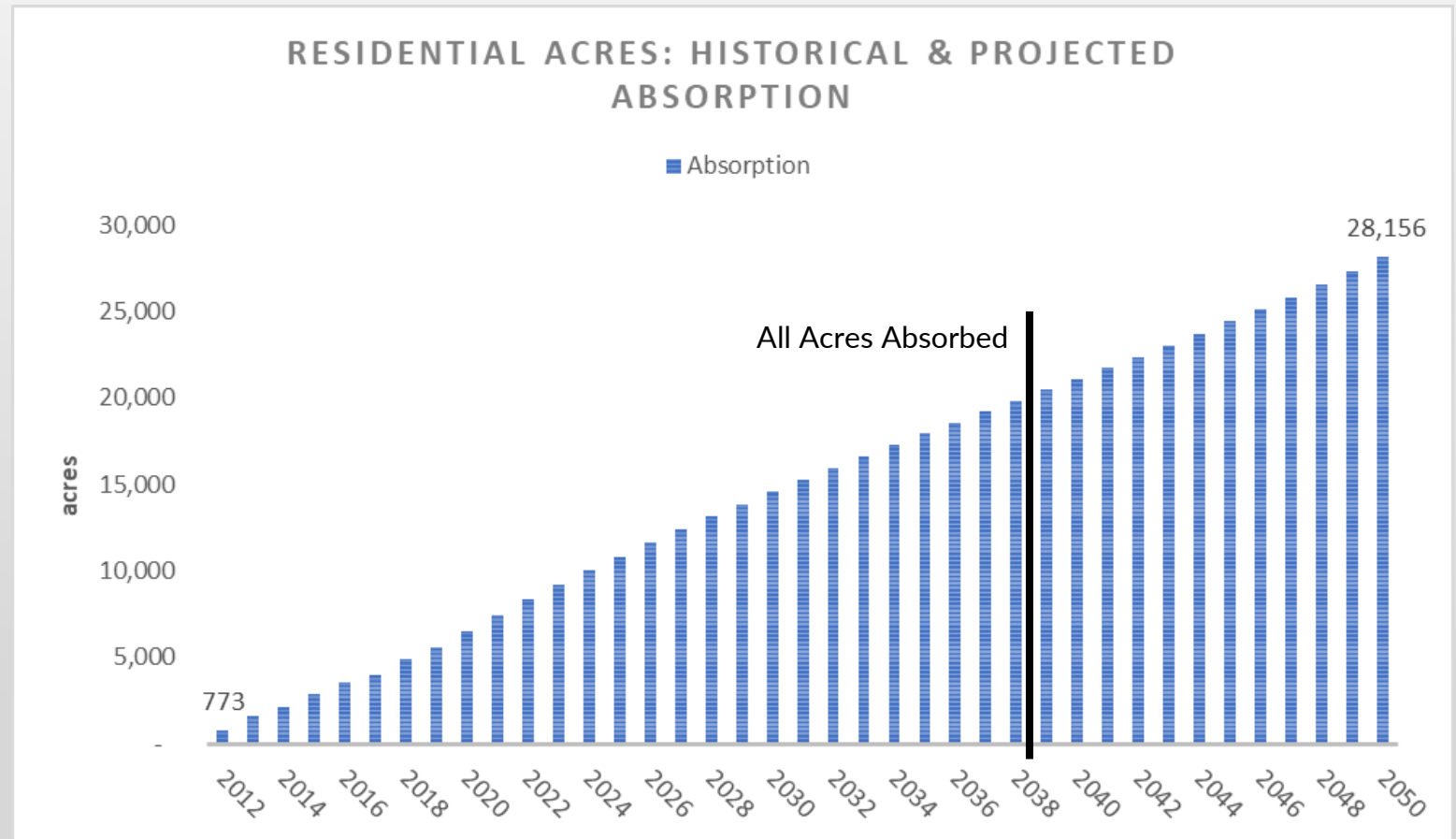


Source: Woods & Poole, Truckee Meadows Regional Planning Agency



# Acreage Absorption Forecast: Residential (12% or Less)

- ❑ Since 2011 the Region has been absorbing residential acreage at a rate of approximately 750 acres per year.
- ❑ This equates to approximately 2,850 housing units per year.
- ❑ As supply shortages increase the price of parcels, the date by which the Region effectively runs out of developable land could well be sooner than 2038.
- ❑ Note: the absorption & available acres in the Study assumes the willingness of parcel owners to sell their parcels at fair market value.

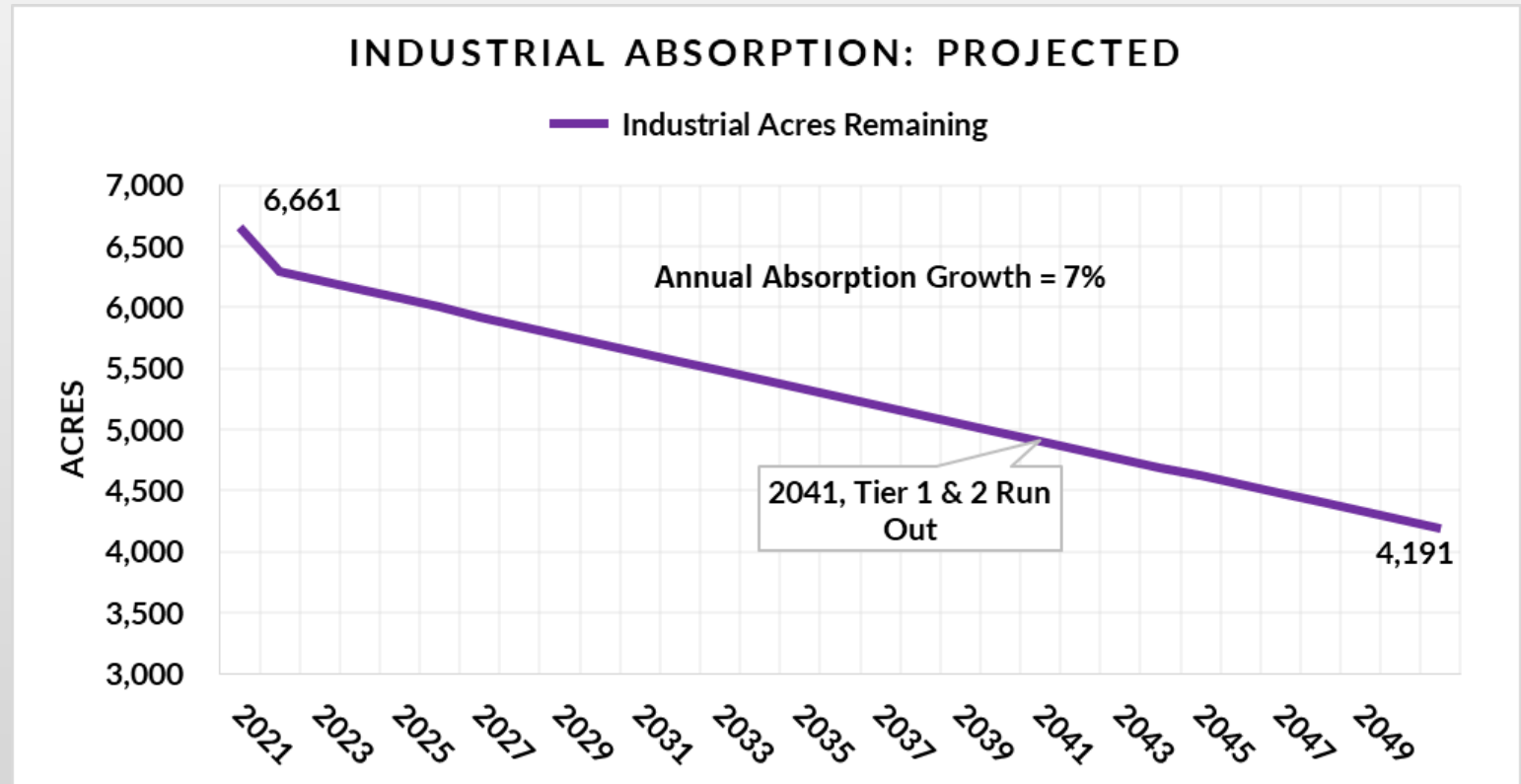


Source: Woods & Poole, Truckee Meadows Regional Planning Agency

# Acreage Absorption Forecast: Industrial (7% or Less), All Tiers

Using Woods & Poole's historical & forecast data of industrial job growth for the MSA, RCG projects that:

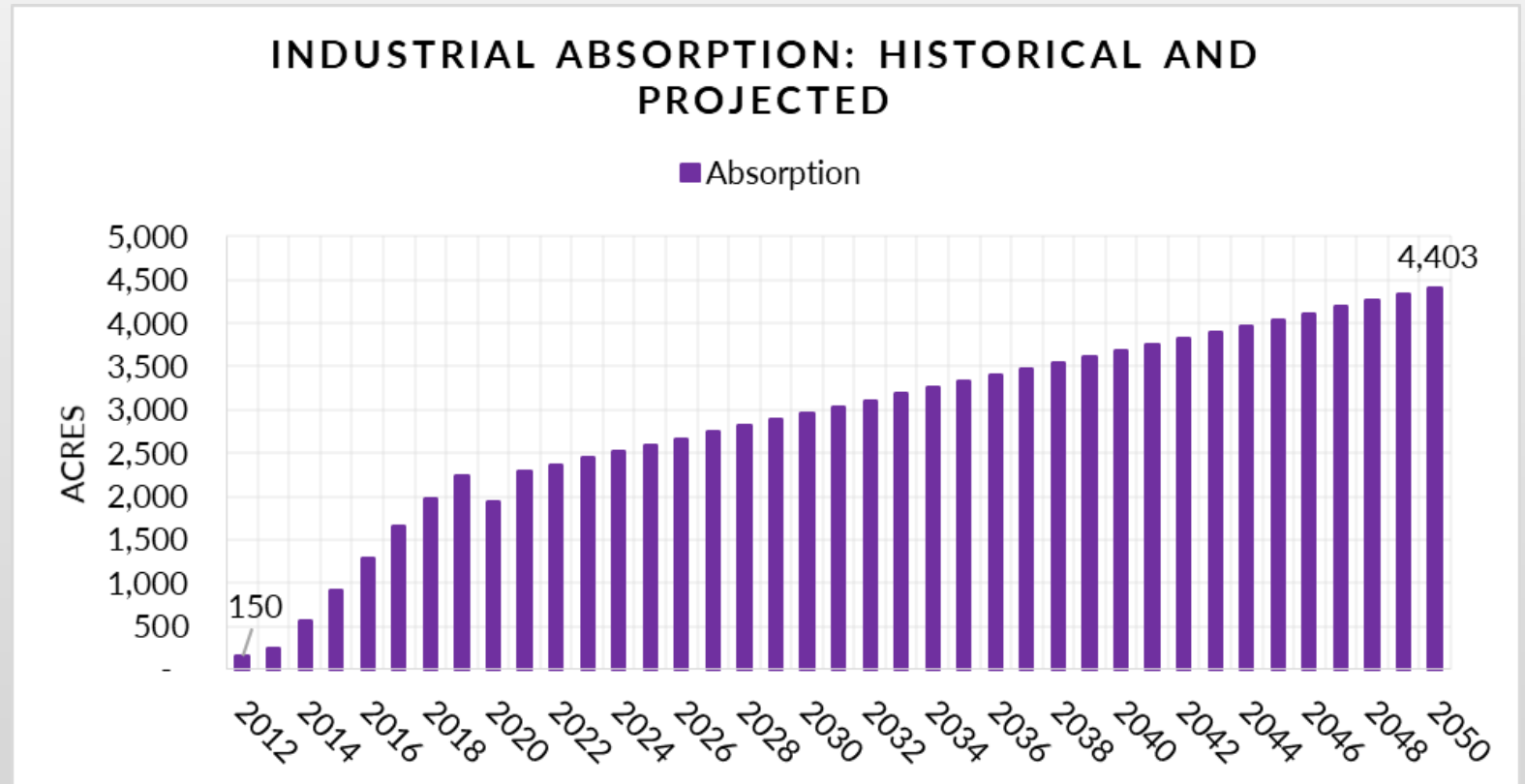
- ❑ Based on historical trends & forecasts, Tier 2 acreage will be absorbed/developed by 2041 (Tier 1 is already absorbed).
- ❑ The growing scarcity of land as the available acres dwindles will eventually make industrial development cost-prohibitive.
- ❑ Note: Woods & Poole's projections are for the MSA, not the EDawn Region.



Source: Woods & Poole, Truckee Meadows Regional Planning Agency

# Acreage Absorption Forecast: Industrial (7% or Less)

- ❑ Since 2011 the Region has been absorbing industrial acreage at an annual rate of approximately 230 acres.
- ❑ This equates to approximately 3.5M square feet of buildings per year.
- ❑ Again, the absorption & available acres in the Study assumes the willingness of parcel owners to sell their parcels at fair market value.

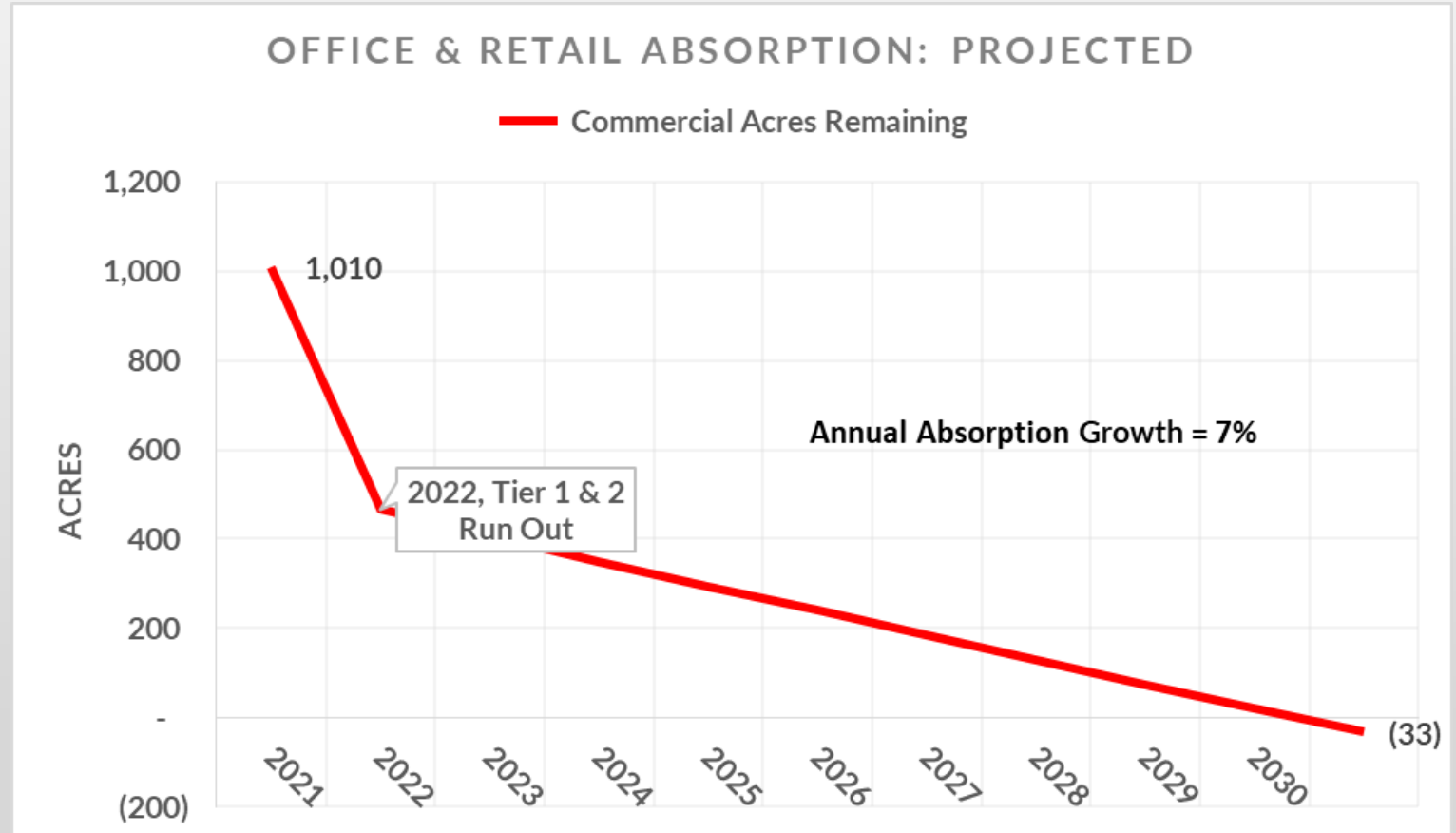


Source: Woods & Poole, Truckee Meadows Regional Planning Agency

# Acreage Absorption Forecast: Office/Retail (7% or Less), All Tiers

Using Woods & Poole's historical & forecast data of retail & office job growth for the MSA, RCG projects that:

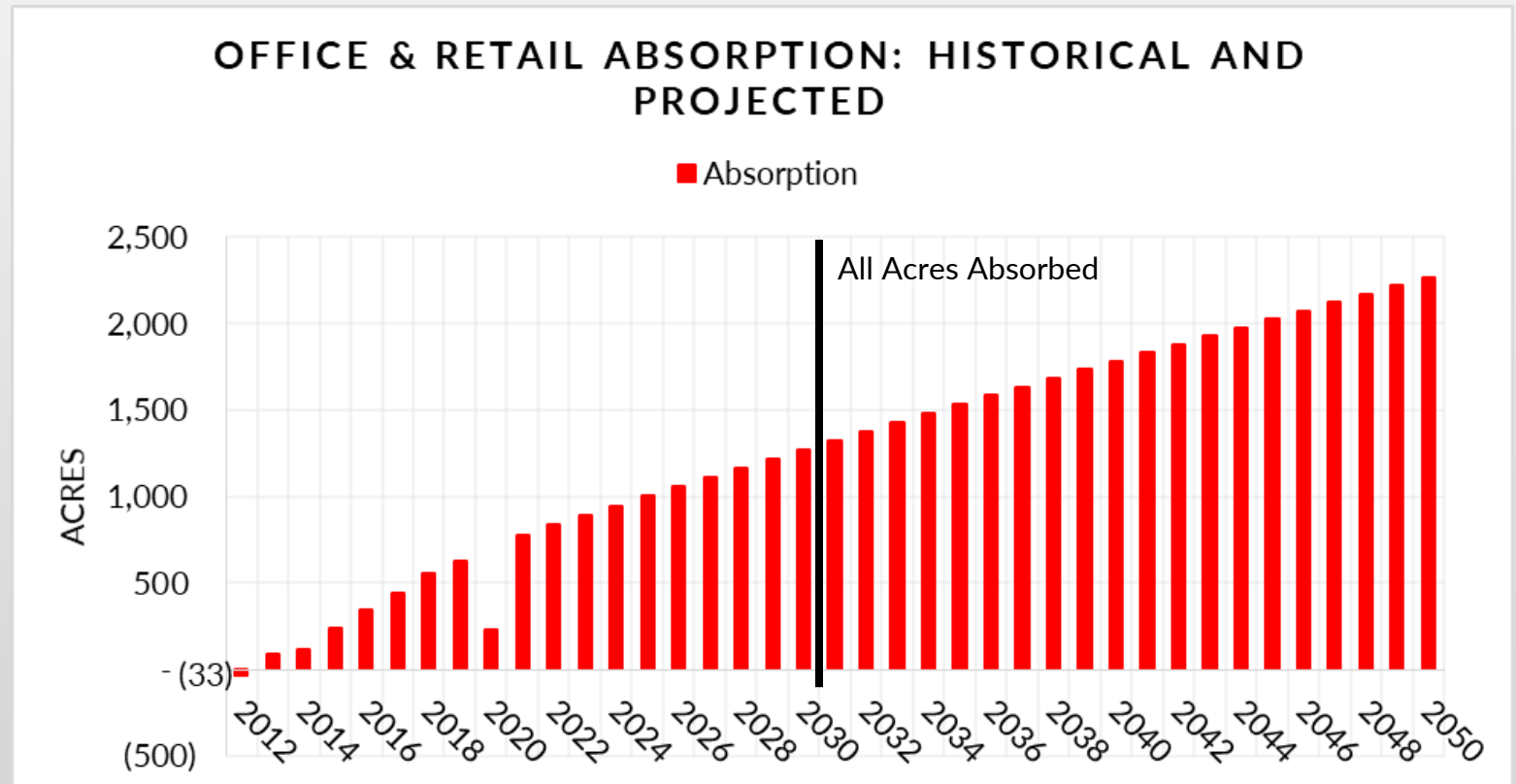
- ❑ The Region will run out of developable land for office & retail by 2030.
- ❑ By the end of 2022, the Tier 2 acreage for office & retail are projected to be absorbed (Tier 1 is already absorbed).
- ❑ In reality, the scarcity of land as the Region approaches 2030 will make office & retail development cost-prohibitive.
- ❑ Note: Woods & Poole's projections are for the MSA, not the EDAWN Region.



Source: Woods & Poole, Truckee Meadows Regional Planning Agency

# Acreage Absorption Forecast: Office/Retail (7% or Less)

- ❑ Since 2011 the Region has been absorbing commercial acreage for office & retail at a rate of approximately 77 acres per year.
- ❑ This equates to approximately 1.3M square feet of buildings per year.
- ❑ Again, the absorption & available acres in the Study assumes the willingness of parcel owners to sell their parcels at fair market value.



Source: Woods & Poole, Truckee Meadows Regional Planning Agency



# Economic Costs of Land Supply Constraints

# Methodology

- Data sources: IMPLAN, Woods & Poole Economics
- IMPLAN metrics for output, jobs, earnings (personal & business), GRP to create base-case
- Woods & Poole Economics growth rates applied to IMPLAN metrics
- 3 scenarios developed:
  - ✓ Unconstrained (“base-case”)
  - ✓ 3% cost disadvantage due to land constraints
  - ✓ 5% cost disadvantage due to land constraints
- ✓ In the base-case, no cost disadvantage; 10% Higher Growth Case, there are cost disadvantages.
- Cost disadvantage: Refers to increased cost burden to firms modeled as a decline in contributions to economic output, jobs, earnings & Gross Regional/Domestic Product (“GRP or GDP”). Compared to the unconstrained base-case.
- Modeled % cost disadvantages via IMPLAN model to estimate disadvantage scenarios

# Annual Economic Impacts: 3% Cost Disadvantage

## Annual Economic Impacts:

❑ Almost \$300M in Gross Regional Product per year

❑ Almost 3,000 fewer jobs per year than the base case

❑ Over \$166M in earnings lost

Impact Type	Employment	Earnings	Gross Product	Spending/Output
Direct	-1,919	-\$107,766,890	-\$192,237,514	-\$421,339,239
Indirect	-541	-\$34,951,755	-\$54,487,727	-\$92,378,270
Induced	-452	-\$23,351,808	-\$48,495,786	-\$77,696,079
Total Benefits	-2,912	-\$166,070,453	-\$295,221,028	-\$591,413,589
Multipliers	1.52	1.54	1.54	1.40

Source: Truckee Meadows Regional Planning Agency



# Annual Economic Impacts: 5% Cost Disadvantage

## Annual Economic Impacts:

- ❑ Almost \$500M in Gross Regional Product per year
- ❑ Almost 5,000 fewer jobs per year than the base case
- ❑ Over \$275M in earnings lost

Impact Type	Employment	Earnings	Gross Product	Spending/Output
Direct	-3,199	-\$179,611,483	-\$320,395,857	-\$702,232,066
Indirect	-901	-\$58,252,925	-\$90,812,879	-\$153,963,783
Induced	-753	-\$38,919,681	-\$80,826,310	-\$129,493,466
Total	-4,853	-\$276,784,089	-\$492,035,046	-\$985,689,314
Multipliers	1.43	1.54	1.56	1.53

Source: Truckee Meadows Regional Planning Agency

# The Hard Reality of Land Scarcity

- There are no Tier 1 parcels remaining in the Region.
- The Region is likely to run out of the more desirable, Tier 2 parcels for residential, industrial, & other commercial use as follows:
  - 2027 for residential
  - 2041 for industrial
  - 2022 for other commercial

# Recommendations & Major Findings

- Nevada's Congressional delegation should pursue changes to federal law, as the Truckee Meadows Public Lands Management Act aims to do, to expand Northern Nevada's public land disposal boundary.
- Northern Nevada developers, especially residential, will face challenges in finding desirable parcels to accommodate projects by 2027 if nothing is done to expand regional access to lands, or sooner if the BLM fails to release lands.
- There are roughly 25,500 gross acres remaining of developable residential and nonresidential land (in parcels 20 acres or more) in the Study Area.
- Approximately 9,700 of those acres have an "above average" rating (see Methodology slide) for the rating system).
- The 25,500 acres represent a fraction of the total acreage in the Region that is not vacant, not usable, too steep, etc.

# Recommendations & Major Findings

- To meet the needs of the expected residential and nonresidential growth by 2050, the region is projected to require approximately 24,300 developable acres.
- Based on the estimated 9,700 acres of more-desirable lands available, demand for those acres would exceed supply by 14,600 acres.
- Failing to ensure an adequate supply of developable land in the region could lead to a 15 – 24 percent reduction in the growth of the Study Area's gross regional product.
- The number of parcels to accommodate large-scale development in the near- and medium-terms is limited and will likely face supply constraints sooner than smaller parcels, especially since most of the larger parcels are 30 or more miles from Metro Reno-Sparks.

# Recommendations & Major Findings

- Adopting pragmatic land use & economic strategies based on hard data are key to building on Northern NV's economic strengths in order to broaden the region's mix of businesses & industries, including higher-quality jobs
- Using creative, innovative & balanced land use strategies will help make Northern NV become a leading Western logistics hub
- Focusing on such strategies will also help attract a broader set of businesses to the region, leading to accelerated technology adoption & workforce development
- Even with the current challenges, Northern NV should aggressively lean forward; other regions are not waiting to develop their sustainable economic development, green technology & balanced land use strategies
- Northern NV's potential can not be underestimated as it moves to a more resilient economy; it can build on its unique business culture & assets, & location

*John Restrepo*  
*Principal*  
*[jrestrepo@rcgecon.com](mailto:jrestrepo@rcgecon.com)*

*Grant McCandless*  
*Research Director*  
*[gmccandless@rcgecon.com](mailto:gmccandless@rcgecon.com)*

*702-967-3188 Ext. 101*

*[www.rcgecon.com](http://www.rcgecon.com)*