DATE: January 14, 2022  
TO: Nick Snead  
FROM: Beth Goodman and Ariel Kane  
SUBJECT: Madras Airport UGB Expansion: Monitoring

Madras expanded its Urban Growth Boundary (UGB) to include the Madras Airport, using the Airport Economic Development Pilot Program in 2019. The Madras Airport was selected for participation in the Pilot Program by the Land Conservation and Development Commission in January 2019. The City adopted the UGB expansion on June 25, 2019. The UGB expansion was completed based on the requirements of OAR 660-024-0075.

Exhibit 1 shows the pilot program site (in green) and the Madras UGB in January 2019 (prior to UGB expansion for the pilot program site). The Pilot Program site included the remainder of the Madras Airport that was not within the UGB in January 2019.

Private businesses located in the pilot program site in March 2018 included: Daimler Trucks North America’s High Desert Proving Grounds, Berg Air, and Cat-Ag. Other private businesses located at the Madras Airport (but not in the pilot program site) include the Erikson Aircraft Collection, Erickson Aero Tanker, and Skydive Awesome!

This memorandum provides information to report on the requirements for monitoring and reporting requirements under OAR 660-024-0075 (10). This memorandum presents the report for these requirements.
The new economic activity resulting from expansion of the Madras UGB to include the Madras Airport is the expansion and further development of Daimler Trucks North America’s (Daimler) High Desert Proving Grounds. The facility is used to test the reliability, durability, and efficiency of manned and unmanned trucks fueled by gas, compressed natural gas, and electric.

Reporting

OAR 660-024-0075 requirements for reporting on the following topics.

(10) The city that expands its UGB pursuant to this rule must provide, to the extent practicable, the following information to the department by September 30, 2021:

Businesses and Jobs

The City is required to report the number of businesses and jobs on the pilot site. The private businesses located at the Madras Airport in the pilot site include:

- Daimler’s High Desert Proving Grounds, a facility for testing new truck technology.
- Berg Air, an airplane maintenance company that also offers flight instruction.
- Cat-Ag, a business that does aerial spraying for agricultural purposes.

Given how few businesses are located on the pilot site, typical sources of data about employment growth, specifically the Oregon Employment Department’s Quarterly Census of Employment and Wages, cannot be used for this analysis because of federal confidentiality rules for use of this data. Information about number of jobs and wages within this memorandum were provided by the companies.

(a) The number of new businesses established within the boundaries of the pilot program site and the number of businesses that relocated to the pilot program site from another location in the urban area;

There are three private businesses located on the pilot program site: Daimler’s High Desert Proving Grounds, Berg Air, and Cat-Ag. No other business located at the pilot program site since the expansion.

(b) The number of jobs created at the pilot program site. Include:

(A) The total number of jobs at businesses located on the pilot program site at the time of the report;

Daimler reports that 12 jobs are located on the pilot site in December 2021.

In December 2021, the following number of jobs are located on the pilot site: (1) Daimler has 12 jobs on the pilot site, Berg Air has four jobs on the pilot site, and Cat-Ag has two jobs on the pilot site.
(B) The number of jobs reported in paragraph (A) that were existing at a business located on the pilot program site before the site was included in the UGB;

Daimler had six jobs, Berg Air had four jobs, and Cat-Ag had two jobs on the pilot site prior to the expansion in June 2019

(C) The number of jobs reported in paragraph (A) that were created by an existing business located on the pilot program site after the site was included in the UGB;

Six jobs reported above were created at Daimler (an existing business) after the pilot program was included in the UGB. Berg Air and Cat-Ag did not add jobs since the pilot site was included in the UGB.

(D) The number of jobs reported in paragraph (A) that were created by a business or businesses that had no employees in the urban area containing the pilot program site before the business located on the pilot program site;

No jobs were created by a business that had no employees in Madras before the business located on the pilot site. Daimler was located at the pilot site prior to expansion of the UGB to include the pilot site.

(E) The number of jobs reported in paragraph (A) that were created by a business or businesses that relocated jobs on the pilot program site from another location within the urban area containing the pilot program site; and

No jobs were created by a business that relocated to the pilot site prior to the UGB expansion. Daimler, Berg Air, and Cat-Ag were located at the pilot site prior to expansion of the UGB to include the pilot site.

(F) The number of jobs reported in paragraphs (C) and (D) at businesses engaged in a traded sector.

All six jobs at Daimler reported in paragraph (C) are traded sector. No jobs were reported in paragraph (D).

(c) The wages of the new jobs described in paragraphs (b)(C) and (D) created at the pilot program site. The wage data may be provided in categories or other generalized fashion;

Daimler reports an average wage of approximately $90,000 in 2021 for the new jobs at the pilot site. The average wage of employees in 2019 was approximately $84,000.

Berg Air and Cat-Ag reported no new jobs.
Unemployment

(d) The most recently available unemployment rate from the Oregon Department of Employment for the county containing the pilot program site and an analysis of the effect of the employment and unemployment in the city by business development at the pilot program site;

The unemployment rate in Jefferson County in June 2019 was about 5.2%, increasing to 5.8% by October 2021.¹

In Q2 2019, Jefferson County had 551 private businesses and 4,763 private jobs. In Q2 2021, Jefferson County had 595 private businesses with 4,674 private jobs. This is growth of 44 private businesses and a decrease of 89 jobs.²

In Q2 2019, Madras had 324 business establishments and 3,908 average covered employees. In Q2 2021, Madras had 334 private businesses with 3,805 average covered employees. This is growth of 10 business establishments and a decrease of 103 jobs.³

The change in number of jobs and increase in unemployment between 2019 and 2021 is likely to be explained by factors other than expansion of Madras’ UGB to include the pilot site. For example, the COVID-19 pandemic affected employment across counties in Oregon, substantially decreasing employment in 2020.

The conclusion is that the change in jobs and unemployment in Madras and Jefferson County between Q2 2019 and Q2 2021 is mostly attributable to changes in the national and state economy, as a result of the COVID-19 pandemic. The inclusion of the pilot site in the UGB added six new jobs to Madras on the pilot site.

Residential Sales

(e) The number of residential properties listed for sale on the Residential Multiple Listing Service with an address from the city containing the pilot program site on a date one month after the commission selects the city and on June 30, 2021;

The number of residential properties within Madras listed for sale in February 2019 was eight. In June 2021, 22 residential properties were listed for sale.⁴

(f) The average sale price of residential properties with an address from the city containing the pilot program site for the period beginning one month after the commission selects the city and ending June 30, 2021;

¹ Unemployment Rate, Seasonally Adjusted, Oregon Employment Department Qualityinfo.org
² Oregon Employment Department Quarterly Census of Employment and Wages.
³ Oregon Employment Department Quarterly Census of Employment and Wages.
⁴ Central Oregon Association of REALTORS, MLS listings.
The average sales price of residential properties within Madras in February 2019 was $206,625, with eight units sold that month. In June 2021, the average sales price was $280,920, with 24 units sold that month.\(^5\)

The change in number of units sold and sales price is likely attributable to factors other than expansion of the UGB to include the Madras Airport. For example, the City of Madras started to implement their Housing Action Plan, which supported development of new housing (both single-family detached housing and multifamily housing) in 2019.

Industrial Development

\(^{(g)}\) The average per-acre price of land zoned industrial listed for sale with an address from the city containing the pilot program site on a date one month after the commission selects the city and on June 30, 2021;

Data about the cost of industrial zoned land within Madras is hard to come by, as there is not a significant amount of industrially zoned land for sale in Madras at any given time. As a result, there is not information about industrial land price in February 2019 and June 2021.

The lack of available industrial land is also one of the primary reasons the City of Madras wanted to participate in this pilot program. Since the UGB has expanded, the City is now able to lease land at the Madras Municipal Airport. Under FAA regulations, the City is only able to lease lands at the Madras Municipal Airport and such leases are to be at a fair market rate (Exhibit 2 and Exhibit 3).

**Exhibit 2. 2019 Madras Airport Lease Rates by Land Type**

Source: City of Madras

<table>
<thead>
<tr>
<th>Land Type</th>
<th>Conclude Value/Acre</th>
<th>Lease Rates (Annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Business Park Sites(^1&amp;(^2)</td>
<td>$56,600</td>
<td>$3,962 $0.09</td>
</tr>
<tr>
<td>Finished Industrial Park Sites(^1&amp;(^2)</td>
<td>$36,000</td>
<td>$2,520 $0.06</td>
</tr>
<tr>
<td>Unfinished Industrial Park Sites(^1&amp;(^3)</td>
<td>$26,000</td>
<td>$1,820 $0.04</td>
</tr>
<tr>
<td>Finished Airside Sites(^2)</td>
<td>$26,000</td>
<td>$5,663 $0.13</td>
</tr>
<tr>
<td>Unfinished Airside Sites(^3)</td>
<td>$16,000</td>
<td>$1,820 $0.04</td>
</tr>
</tbody>
</table>

\(^1\) Business park and industrial park site rents based on seven-percent of fee value
\(^2\) Sites with full infrastructure (all utilities)
\(^3\) Sites with no infrastructure (no utilities)

\(^5\) Central Oregon Association of REALTORS, MLS listings.
Exhibit 3. 2020 Madras Airport Lease Rates by Land Type

<table>
<thead>
<tr>
<th>Land Type</th>
<th>Annual Lease Rate ($/Acre)</th>
<th>Annual Lease Rate ($/SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Business Park Sites</td>
<td>$3,962.00</td>
<td>$0.09</td>
</tr>
<tr>
<td>Finished Industrial Park Sites</td>
<td>$2,520.00</td>
<td>$0.06</td>
</tr>
<tr>
<td>Unfinished Industrial Park Sites</td>
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<td>$0.04</td>
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<td>Finished Airside Sites</td>
<td>$5,663.00</td>
<td>$0.13</td>
</tr>
<tr>
<td>Unfinished Airside Sites</td>
<td>$1,820.00</td>
<td>$0.04</td>
</tr>
<tr>
<td>Public Right-of-way Lighting &amp; Landscaping Fee</td>
<td>$533.24</td>
<td>$0.01</td>
</tr>
</tbody>
</table>

Source: City of Madras

Based on sales data from the Jefferson County Assessor, two parcels of industrial land were sold in 2019, one in August and the other in October. The average sales price per acre for the two properties was approximately $60,000 per acre.

Assessor’s data shows one sale of industrial land to date in Madras (in May 2021), with an average sales price of $58,000 per acre.

Investment

(h) The dollars of private investment in the pilot program site after the pilot program site is included in the UGB, as determined from standard building permit records;

On the pilot site, Daimler made $9 million in capital investments in 2019, much of which was made before the pilot site was included in the UGB (in June 2019). The investment in 2019 was made based on an understanding that the pilot site would be included in the UGB. Daimler made $2.3 million in investments in 2020 and $1.5 million in investments in 2021. In total, the business on the pilot site made $12.8 million in investments between 2019 and 2021.

The investments were in facilities and included adding: a performance loop track, autonomous testing facility, ADAS testing intersection, storage and warehouses, and a new electric truck charging station. Exhibit 4 shows the site plan for Daimler’s High Desert Proving Grounds, located at Madras’ Airport. It’s worth noting that the City is working with Daimler on expanding existing buildings and constructing additional truck testing facilities.

Daimler expects to invest an additional $20 million (approximately) in their facilities at the Madras Airport approximately over the next 5 years. Longer-term monitoring of economic changes at the pilot site, such as over the next 10 to 20 years, may show the benefits of the UGB expansion, with growth in jobs and this (and potentially other) investments in capital facilities and equipment.
Berg Air and Cat-Ag report that they made no substantial capital investments (of $25,000 or more) on the pilot site since expansion of the UGB. Both businesses lease land from the City and no building permits were issued for these companies since expansion of the UGB.
Economic Growth

(i) An analysis of the economic growth of the city and county since the implementation of the pilot program.

The unemployment rate in Jefferson County in June 2019 was about 5.2%, increasing to 5.8% by October 2021.\(^6\)

In Q2 2019, Jefferson County had 551 private businesses and 4,763 private jobs. In Q2 2021, Jefferson County had 595 private businesses with 4,674 private jobs. This is growth of 44 private businesses and a decrease of 89 jobs. \(^7\)

In Q2 2019, Madras had 324 business establishments and 3,908 average covered employees. In Q2 2021, Madras had 334 private businesses with 3,805 average covered employees. This is growth of 10 business establishments and a decrease of 103 jobs. The average wage per job increased from $36,000 in Q2 2019 to $44,000 in Q2 2021, a 21% increase.\(^8\)

The change in number of jobs and increase in unemployment between 2019 and 2021 is likely to be explained by factors other than expansion of Madras’ UGB to include the pilot site. For example, the COVID-19 pandemic affected employment across counties in Oregon, substantially decreasing employment in 2020. For example, the COVID-19 pandemic affected employment across counties in Oregon, substantially decreasing employment in 2020. Between Q4 2019 and Q2 2020, Oregon lost 238,000 jobs, a 12% decrease. Between Q2 2020 and Q2 2021, Oregon added 142,000 jobs back, an 8% increase. Not all of this change in employment is directly attributable to the COVID-19 pandemic but the majority of it is.

The Gross Domestic Product (GDP) in Jefferson County for all industries was $830 million in 2019 and $823 million in 2020 (the most recently available data), a decrease of $7 million or 0.8% of GDP. GDP for Manufacturing (the industry that Daimler is in, on the pilot site) decreased from $122 million in 2019 to $113 million in 2020. These changes are similar to decreases in GDP in Oregon over the 2019 to 2020 period, which had a $2.8 billion decrease in GDP or a 1.16% decrease.\(^9\)

The conclusion is that the changes described above (in jobs, unemployment, and GDP) in Madras and Jefferson County between are mostly attributable to changes in the national and state economy, as a result of the COVID-19 pandemic. Monitoring economic changes over a longer period, such as a 10 or 20 year period may show the long-term impact of expansion of the UGB, with potential growth in jobs and investments in capital facilities and equipment.

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\(^6\) Unemployment Rate, Seasonally Adjusted, Oregon Employment Department Qualityinfo.org

\(^7\) Oregon Employment Department Quarterly Census of Employment and Wages.

\(^8\) Oregon Employment Department Quarterly Census of Employment and Wages.

\(^9\) U.S. Bureau of Economic Analysis; GDP data is not available for the City of Madras