



# COLUMBIA GORGE EXPRESS

## 2016 - 2019 Performance Report Card





# EXECUTIVE SUMMARY

The Oregon Department of Transportation (ODOT) launched the Columbia Gorge Express (CGE) program on Memorial Day weekend 2016. In 2017, the Western Federal Lands Division of the Federal Highway Administration awarded ODOT a Federal Lands Access Program (FLAP) grant to expand CGE, funding the program through September 2020. As CGE approaches the end of its current grant cycle, assessing its performance is integral to understanding how the program has met its goals, while providing insights into what service should look like in 2021 and beyond.

CGE has four primary goals. Based on analysis of performance data and input from stakeholder interviews, a letter grade has been assigned to objectives within each goal.

1. Improve transit access and options to recreational destinations in the Columbia River Gorge and between East Multnomah County and The Dalles
2. Enhance mobility and safety in the Columbia River Gorge
3. Address congestion and limited parking capacity at Multnomah Falls
4. Protect natural and cultural resources; reduce illegal parking

## Goal: Improve Access

CGE Ridership **A**

Equity **A**

## Goal: Enhance Mobility and Safety

Efficiency **B**

Cost-Effectiveness **C**

On-Time Performance **C**

Gorge Safety **N/A**

## Goal: Reduce Congestion

Traffic Congestion **B**

Exit 31 Gate Closures **B**

## Goal: Protect Resources

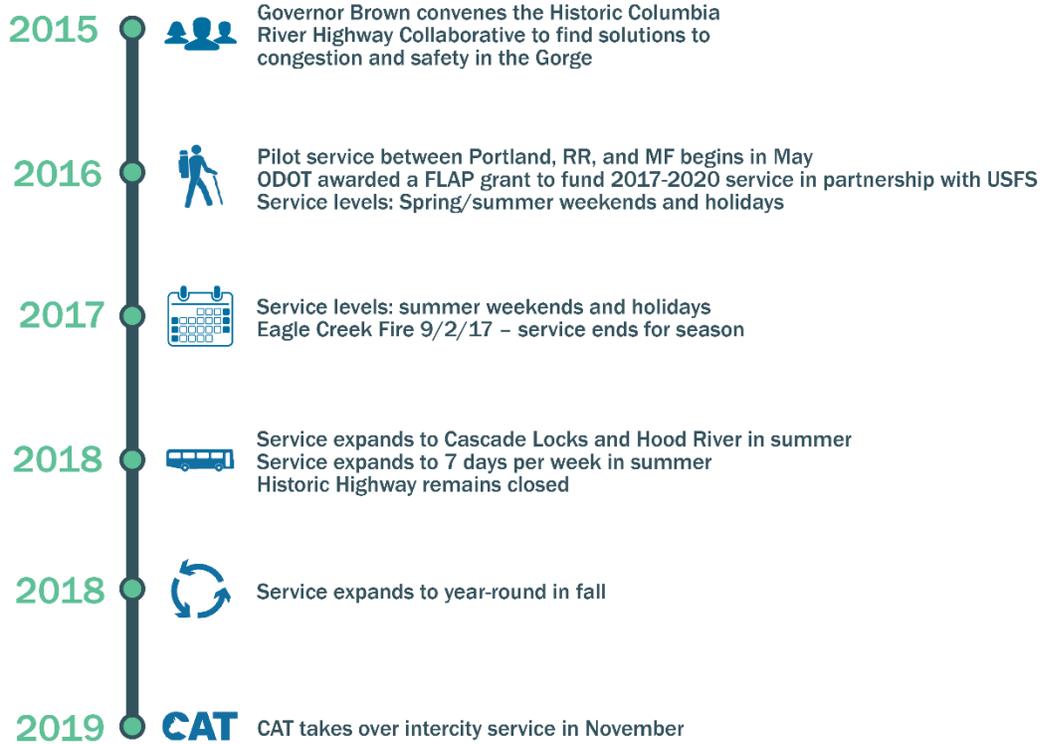
Environmental Impacts **B**

Parking Impacts **C**

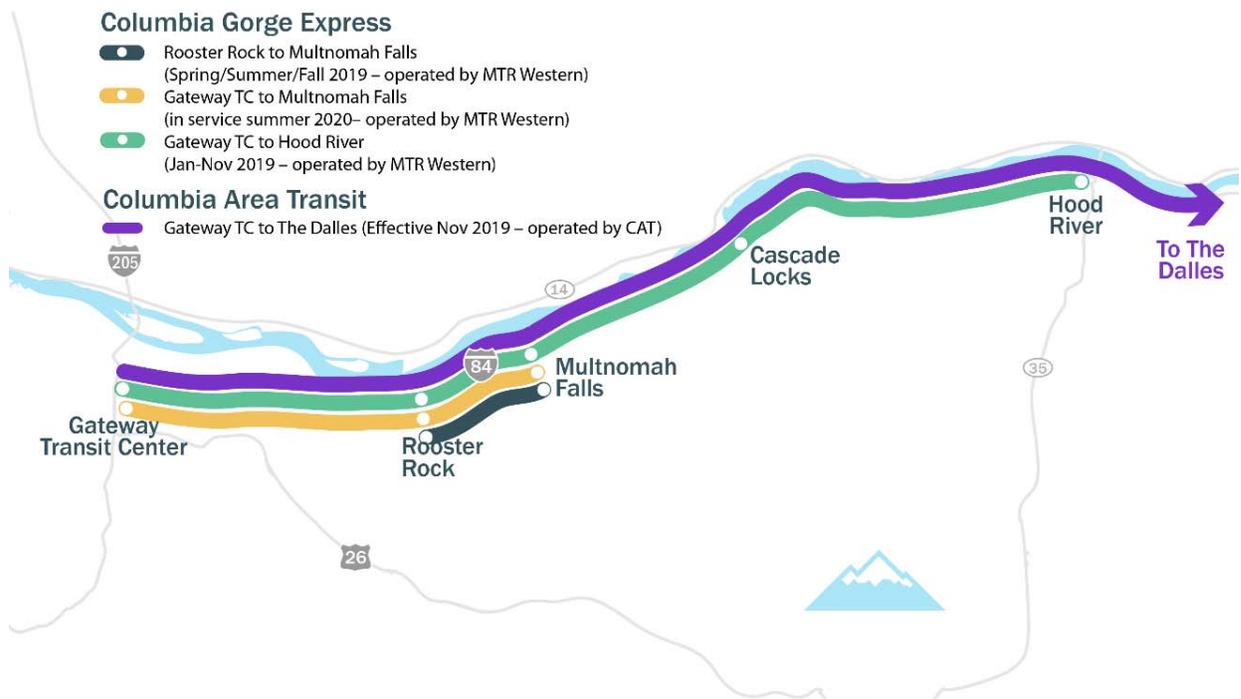


# COLUMBIA GORGE EXPRESS EVOLUTION

## Service Timeline



## 2019 System Map





## PERFORMANCE REPORT CARD

### Goal: Improve transit access and options to recreational destinations in the Columbia River Gorge and between East Multnomah County and The Dalles

Prior to CGE, intercity public transit service in the Gorge was limited. In 2016, there were 2 round trips per week between Gateway Transit Center and Hood River (Tuesdays and Thursdays only), operated by Columbia Area Transit. In May 2018, CGE introduced daily service in the corridor. As of November 2019, there are 8 weekday and 6 weekend round trips, including 2 direct daily connections to The Dalles.

CGE services demonstrate consistent demand and opportunity for continued growth, particularly during the peak months of May through September. Ridership on services to Multnomah Falls and Hood River has exceeded projected estimates. Ridership on the Rooster Rock to Multnomah Falls shuttle has remained constant (with the exception of 2018, when ridership was much higher due to the closure of the Historic Highway); growth in shuttle ridership is constrained by limited capacity. **There is overwhelming stakeholder support for continuing, and expanding if possible, the Rooster Rock to Multnomah Falls shuttle.**



#### CGE Ridership

- CGE transported 226,704 one-way trips throughout the Gorge since its inception on May 27, 2016 through the end of the fall shoulder season on November 3, 2019.
- Total annual ridership increased by 155%, from 30,090 boardings in 2016 to 76,867 in 2019.
- Boardings at Multnomah Falls grew from 12,722 in 2016 to 33,040 in 2019.
- Service availability increased from 61 days in 2016 to 296 in 2019.

#### Equity

- In 2019, 49% of CGE riders had no access to a vehicle or no other option for travel to their destination.
- 35% of riders in 2019 represented people of color (down from 43% in 2018). 24% of the Portland Metro area population identified as people of color and 30% of the U.S. population identified as people of color in 2018 (source: ACS 2018).



## Goal: Enhance mobility and safety in the Columbia River Gorge

CGE is one part of a larger strategy to move people to and through the Gorge without the use of personal vehicles. Ridership on CGE has been strong, but there is also a need to evaluate how well the service has performed in terms of enhancing mobility. To measure mobility, the team assessed CGE's efficiency, effectiveness, and on-time performance.

As safety was a major impetus for CGE's launch, the team analyzed crash data for the area around Multnomah Falls. The limited availability of reported data, coupled with the challenge of correlating CGE (or public transit in general) with reported incidents, made it impractical to assign a grade to the safety objective.



CGE  
Efficiency




Cost-  
Effectiveness



### CGE Efficiency

- Ridership is heavily seasonal, with average daily boardings of 653 in summer, 137 in spring/fall shoulders, and 30 in winter (2019).
- Riders per hour dipped from 22.5 in 2016 to 15.4 in 2019 (this decline is primarily due to the 2018 service expansion to Hood River and year-round service). A typical rural service carries 10 passengers per hour while an urban route carries 20 per hour. CGE, which serves both rural and urban contexts, sits between these two metrics.
- Shoulder and off-season boardings per hour is fairly low at 7.4 per hour in 2019.

### CGE Effectiveness

- Cost per hour lowered from \$119.91 (2016) to \$115.60 (2019), which is lower than the cost of a major urban provider like TriMet (\$145/hour) but higher than a small city system like Columbia Area Transit (\$100/hour).
- In general, service is becoming more effective. Service hours were reduced in 2019, but ridership remained about the same.
- Scheduling continues to be a challenge, with long lines for westbound service on weekend afternoons.



On-Time  
Performance




Gorge  
Safety



### CGE On-Time Performance

- In 2019, average on-time performance for CGE was 75%. On-time performance goals for many transit agencies ranges from 85-90%.



- Eastbound runs typically had better on-time performance than westbound runs.
- Hood River westbound (60% on time, 18% late, 22% early) and Cascade Locks westbound (64% on time, 24% late, 12% early) were the worst performing stops.
- The Rooster Rock shuttle had the best on-time performance of any route, likely due to the shorter distance and longer dwell times at Multnomah Falls (to account for gate closures).

### **Gorge Safety**

- Overall the number of reported crashes at or near the I-84 Multnomah Falls parking is very small.
- Crashes at Exit 31 are more frequent than crashes at other nearby exits; eastbound connection crashes have declined while westbound crashes increased through 2017.
- Vehicle crashes around Exit 31 on I-84 are down in 2019 compared to 2015 and 2016.



## Goal: Address congestion and limited parking capacity at Multnomah Falls

It is challenging to directly correlate the presence of CGE with congestion changes. Millions visit Multnomah Falls each year, thus it would be difficult for CGE to have a measurable impact (for example, 2019 CGE ridership accounts for an estimated 4% of annual visitation at Multnomah Falls). **Stakeholders generally agree that CGE has to be part of a larger, multi-faceted solution to truly change travel patterns.** There are, however, some indicators that show positive changes to general traffic conditions in the Gorge. Anecdotally, stakeholders agree that CGE has reduced congestion around the I-84 parking lot, but there remain significant challenges on the Historic Highway.



### Traffic Congestion

- Annual vehicle hours of delay near Exit 31 have dropped by 70%, from approximately 12,800 hours in 2015 to 3,900 hours in 2019.
- Summer eastbound delay was far higher in 2015 than in 2016 and onward, when CGE began operation.
- Since service began, CGE has diverted a total of 20,725 cars from the I-84 parking lot (about 2% of tracked vehicle volume in the I-84 lot from 2016-2019). Diversions peaked in 2018 when the Historic Highway was closed.
- The closure of the Historic Highway waterfall corridor (Bridal Veil to Ainsworth State Park) from September 4, 2017 to November 23, 2018 shows the power of a drastic access change. The closure resulted in higher demand for the CGE shuttle compared to previous years. Ridership increased significantly and there were no parking violations on the closed Historic Highway.

### Exit 31 Gate Closures

- The total number of days with gate closures was nearly identical in 2018 and 2019 (167 and 165, respectively); gate closures in 2017 were much lower at 114 days, this difference is mostly due to the Eagle Creek Fire.
- Looking at peak season only (June, July and August), the number of closures and duration of closures has increased every year from 2017 – 2019.
- Gate closures remain a challenge for transit, impacting operational costs, on-time performance, and customer experience. When the eastbound gate is closed, the CGE buses must continue on I-84 and turn around at Exit 35 Ainsworth, adding about 8 service miles and 15+ minutes to the trip.
- Temporary barriers at the westbound exit were added in summer 2019. Passenger vehicles trying to enter the parking lot from the westbound side were not permitted entry until the eastbound gate reopened, thus blocking any CGE buses behind them. The westbound barriers also delayed employee shuttles and special events vehicles for the Multnomah Falls Lodge.
- Drivers within the Multnomah Falls parking lot who wait for a spot to open impede traffic flow; it is sometimes faster for a westbound bus to go east to Exit 35 Ainsworth, turn around, and then travel back on I-84 westbound to get to RR or GTC (adding another 8 miles and 15 minutes to the trip).



## Goal: Protect natural and cultural resources; reduce illegal parking

CGE is funded through the Federal Lands Access Program and serves sites in a federally designated National Scenic Area. Preservation of natural space is therefore a priority of CGE funders and partners.

Reducing illegal parking along the Historic Highway was originally framed as a CGE goal for two reasons:

1. Parking in non-designated areas can damage wildlife
2. Drivers in search of parking can block through movement on the Historic Highway, resulting in major congestion (and carbon emissions) and degrading the ability to access federal recreation land

Other than Multnomah Falls, CGE does not serve sites along the Historic Highway, which is where the majority of illegal parking activity occurs. It is therefore challenging to directly correlate parking conditions on the Historic Highway with CGE service. Transit alone cannot change visitor behavior in this corridor; reducing illegal parking and congestion on the Historic Highway necessitates a much broader approach, of which transit is one strategy.



### Environmental Impacts

- From 2016 - 2019, CGE service reduced carbon emissions in the Gorge by 170 metric tons of CO<sup>2</sup>
- CGE's 2019 emission reductions (60 metric tons) make up 0.001% of the Portland Metro's CO<sup>2</sup> levels annually produced from cars and light trucks
- Visitors who drive to Multnomah Falls and circle to look for parking before taking the Rooster Rock shuttle add to carbon emissions, negating a portion of CGE's impact

### Parking Impacts

- Parking violations on the Historic Highway in 2019 are down 53% from 2017
- CGE has not had an impact on congestion or parking on the Historic Highway
- Anecdotally, parking issues were less concentrated at Multnomah Falls in 2019 and instead were more dispersed throughout the Gorge; backups on I-84 at Rooster Rock have increased

## Summary

Figure 1 summarizes progress toward goals; a detailed table with all data is in the CGE Report Card below.



**Figure 1 Meeting our goals**

Goal	Performance Measure	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019
Improve transit access to recreation destinations between East Multnomah County and The Dalles	Increase amount of transit service between Portland and The Dalles	●	●	●	●
	Increase transit ridership at recreation destinations	-	●	●	●
	Increase the availability of transit all year	-	●	●	●
	Enhance equitable access to recreation opportunities	-	●	●	●
Enhance Gorge mobility and safety	Increase transit ridership in the Gorge	●	●	●	●
	Meet or exceed ridership projections for service expansion to Cascade Locks and Hood River	-	-	●	●
	Provide efficient service	-	●	●	●
	Transition intercity service to an established transit provider	-	-	-	-
	Reduce vehicle crashes at Exit 31 EB	●	●	●	-
Address congestion and limited parking at Multnomah Falls parking lot	Reduce driving trips to Multnomah Falls parking lot	●	●	●	●
	Reduce congestion at Exit 31 EB	●	●	●	●
Protect natural and cultural resources, reduce illegal parking	Reduce carbon footprint of Gorge visitors	-	●	●	●
	Reduce illegal parking along Historic Highway	●	●	●	●

- = Made progress toward measure / made improvement
- = No progress toward measure / no change
- = Degraded progress toward measure / conditions worsened



## **STAKEHOLDER INPUT**

The team conducted several interviews with stakeholders to discuss CGE strengths, opportunities, and the future of the service and has integrated feedback throughout the report card.

Stakeholders' wish list for CGE 2021 and beyond:

- Fix the I-84 Multnomah Falls parking lot. Stakeholders differed in opinion on whether to close the lot entirely to passenger vehicles or find another way to tackle congestion.
- When ODOT closes the westbound ramp, it negatively affects transit service.
- Get the service frequency right based on ridership – more westbound service is needed on summer afternoons. There is also a desire for service to start earlier and end later. Yet the biggest issues occur in afternoon, when passengers trying to go westbound can wait up to 2 hours for a bus.
- Add much more robust marketing, including more marketing to local communities, more information distribution to places that reach tourists, and supporting a Gorge to Airport message.
- Offer (or better market) one-seat ride connection to The Dalles
- Price parking at I-84 Multnomah Falls lot and Rooster Rock, and use funds to support transit and traffic enforcement.
- First-mile / last-mile connections to CGE stops
- Tackle congestion on the Historic Highway. Add flaggers and traffic enforcement on Historic Highway.
- Add stops at trailheads and Bonneville Dam. [Note: USFS prefers not to add more sites to CGE].
- Accommodate pets and bikes
- Need alignment among stakeholders on the bigger picture ideas, the longer-term solutions – which ones should be pursued?
- Explore additional places for shuttle parking, including Benson State Park, Dalton Point, Hatfield Visitor Center, and the unused gravel lot north of Lewis and Clark to reduce pressure on Rooster Rock.