Our strategy
We want to have the safest infrastructure possible. Safe infrastructure mitigates structural safety risks on Oregon’s transportation system. Working with the Federal Railroad Administration, we use a combination of inspections, enforcement actions and industry education to improve railroad safety and reduce the incidence of derailments and the potential for release of hazardous materials.

About the target
Even with an increase of four incidents in 2018, the number of derailments has steadily decreased to a level below the target. For 2014 through 2020, we’ve lowered the target to 25. Even as rail traffic increases, this trend indicates significant improvement.

How we are doing and how we compare
In 2018, there were 20 derailment incidents, an increase from 16 derailments in 2017. From 2009 to 2018, derailments have increased and decreased from year to year with the average being 17. In 2014, we lowered the target to 25. The number of inspections, which is proportional to the number of qualified inspectors on staff, is a factor in the reduction of derailments. In 2018, ODOT completed 1,518 inspections and had 20 derailments, compared with 2017’s 1,317 inspections and 16 derailments.

According to FRA’s 2018 data for Oregon and its neighboring states, derailments increased in Oregon, Nevada, Idaho and California and decreased by one in Washington The rail systems differ among the states in terms of track miles and the number of carloads, e.g. California and Washington have larger systems than Oregon while Idaho and Nevada have smaller systems. A comparison of derailments per track mile (miles of track in each state) for 12 months ending December 31, 2018, shows Oregon with
Factors affecting results and what needs to be done. From 2017 to 2018, Oregon derailments went from 16 to 20. An increase in rail traffic contributed to the rise while an increased number of inspections helped keep the number in check. Human error and track caused yard derailments are the most significant reasons for the derailment number remaining relatively flat. Increasing the number of inspections will help reduce both yard and human error derailments.

Operating Practices inspections, which directly affect human error caused derailments, went from 430 in 2017 to 413 in 2018. Track inspections, which directly affect yard derailments, were slightly reduced with 220 in 2017 and 168 in 2018. In 2015, we hired four additional inspectors and replaced staff that had retired. It took more than a year to federally certify current staff with the newest employee on scheduled to be certified in April, 2018. In 2018, we lost one signal inspector and two track inspectors to retirement and moving to different agencies. It will take more than a year to certify their replacements. We expect a decline in derailments to continue into future years after the certification of the new inspectors and achievement of a full staff. Except for the 2010, 2013, 2014 and 2018 spikes, the decline has steadily continued since 2009, with the hiring, training and certification of new inspectors to replace the turnover in staff. This supports the need for certified inspectors performing regular inspections. Recruitment and retention of qualified compliance (inspector) personnel is vital. Analysis of data from previous inspections (track conditions, operating issues, etc.) helps us identify areas on which to focus resources and inspections. ODOT’s Rail and Public Transit Division is dedicated to reducing derailment accidents. As rail inspectors identify areas of concern, they take holistic approaches by intensely focusing on those areas with multiple disciplines. The Rail Safety Section is currently performing inspections with Washington State to better develop relationships, ensure consistency in both states and reduce derailments on a broader geographic scale.

About the data
The reporting cycle is calendar year. The data is based upon reports submitted by the railroads to the FRA. Under federal regulations, railroads are required to report all derailments meeting federally mandated thresholds to the FRA.

Contact information
Joe Denhof
ODOT Rail and Public Transit Division
503-986-4169

Data source
ODOT Rail and Public Transit Division