

Kayak Public Transit Asset Management/Maintenance Plan

The 2016 Transit Asset Management (TAM) regulation requires all transit providers to identify assets and condition in order to strategically manage them and ensure that facilities, vehicles, and additional assets are operating in a state of good repair. Kayak Public Transit, a transit service provider for the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) in Oregon developed an internal maintenance and asset management plan in 2013, which enhanced monitoring and reporting at the agency and improved visibility over asset condition and maintenance activities.



TRANSIT ASSET MANAGEMENT

Background

The Federal Transit Administration (FTA) requires transit providers receiving capital grant funds to develop a transit asset management plan for federally funded vehicles, major equipment and facilities, in order to ensure that assets are kept in a state of good repair. Kayak Public Transit is small transportation agency operated by the Confederated Tribes of the Umatilla Reservation (CTUIR) in Oregon. The agency is funded primarily through FTA grants (5310, 5311) administered by the Oregon Department of Transportation (ODOT), while the CTUIR tribal government provides administrative support (IT, HR, Legal) and maintains the agency's maintenance facility (via the Public Works Department). By the second quarter of 2019, Kayak Public Transit will operate 13 vehicles, including a trolley, shuttle buses, and shuttle vans.

As a small agency with limited staff and resources, Kayak Public Transit has struggled in the past to keep complete and accurate records on maintenance activities, with little visibility into whether vehicles were reaching the end of their useful life or costing more than expected over the lifecycle. When Kayak Public Transit's service began in 2002, the agency relied on a contractor for vehicle maintenance and recordkeeping, as it did not have its own maintenance facility. However, upon opening a new transit center in 2013, which included a vehicle maintenance shop, Kayak Public Transit relieved the contractor of maintenance responsibilities and developed a new comprehensive performance measurement and management program for facility and vehicle maintenance. With limited budget and staff, but with the help of a new vehicle information management system (VIMS) and collaboration with Oregon Department of Transportation (ODOT), Kayak Public Transit has since advanced its maintenance practices and is seeing benefits from preventative and predictive maintenance.

The Development Process

Upon assuming maintenance responsibilities in 2013, Kayak Public Transit had to learn how to operate the transit service with a small staff and outdated maintenance logs. The agency found that due to inconsistent and incomplete maintenance documents, they did not have information on the latest maintenance activities or good data to drive comprehensive asset management, putting future reliability and service in question. Additionally, ODOT had updated statewide maintenance requirements

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for transit providers under the ODOT Capital Asset Management Plan,¹ which applied to Kayak Public Transit's new maintenance facility and newer vehicles.

To respond to the State requirements, the agency hired a full-time

maintenance manager, and staff began to develop a plan that would fit present and future needs. Kayak Public Transit relied on guidance from ODOT's Capital Asset Management Plan, which included requirements for inventorying and tracking the management of vehicle, equipment, and facility assets (prior to the 2016 FTA Transit Asset Management rule). ODOT's plan provided a model that was flexible enough for Kayak Public Transit to adapt it to its specific needs. The team at Kayak Public Transit developed maintenance guidelines with assistance from the National Rural Transit Assistance Program (RTAP) and in partnership with a public transit provider in Walla Walla, WA. The external support helped the agency ensure that the maintenance and asset management plan aligned with leading asset management practices of the time.

The first iteration of Kayak Public Transit's maintenance and asset management plan recorded maintenance activities by hand on paper documents, which was a significant improvement over the previous practices, but less efficient or accurate than using an online system. Kayak Public Transit staff made the case to tribal leadership that software would help streamline reporting and allow for better visibility into asset management, which led to implementing the vehicle information management system (VIMS) Fleetio in 2017. With the VIMS, Kayak migrated critical historical data such as vehicle specifications, performance measures, and inspection data into the system. The agency also integrated its legacy vehicle management system and GPS tracking system, allowing Fleetio to easily and automatically track mileage data. Kayak Public Transit staff credit the improvements with dramatically increasing productivity and schedule monitoring, and improving the reporting of assets and activities to the National Transit Database (NTD) and the Oregon Public Transit Information System (OPTIS).

One of Kayak Public Transit's top priorities for the maintenance and asset management plan has been consistent and accurate data collection. To support and maintain good data, the agency developed data collection guidelines to ensure consistency and reliable results. Kayak Public Transit also recently undertook an external audit of vehicle asset management efforts, which confirmed consistency between data collection and the fleet management software, as well as an 88 percent on-time performance for completing scheduled maintenance.

This audit and its past experience with asset management meant that Kayak Public Transit had most of the pieces in place to align the agency's maintenance and asset management plan with the FTA TAM requirements in 2018, as a participant in the ODOT Group TAM Plan.

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¹ <https://www.oregon.gov/ODOT/RPTD/RPTD%20Document%20Library/Capital-Asset-Management-Handbook.pdf>

Why it Matters

Kayak Public Transit's internal development of a maintenance and asset management plan demonstrates how tribal and small transit agencies can meet FTA requirements despite limited resources. Kayak Public Transit's example highlights key lessons for other smaller transit agencies and tribal providers:

- **Asset management provides a valuable approach to improve fleet maintenance practices.** In Kayak Public Transit's case, the opportunity was forced largely by the opening of a new maintenance facility, the hiring of a full-time maintenance manager, and the dissolution of the agency's outsourced maintenance contract. Even without a new facility or with a maintenance contractor, however, smaller agencies can reduce fleet maintenance costs and time with a proactive asset management approach built on a clear and consistent maintenance plan.
- **Supportive partners at other agencies or industry associations can provide valuable assistance and expertise in transit asset management.** Kayak Public Transit benefited significantly from ODOT's proactive approach to transit maintenance planning and from collaboration with other transit providers, industry associations, and State, local and Federal partners. The staff at Kayak Transit were able to leverage this support to create a plan that met the requirements, while also meeting the agency's specific needs.
- **Small and tribal transportation agencies can benefit from effective software solutions, at almost any budget.** Kayak Public Transit incorporated a comprehensive fleet management software solution into its daily asset management processes, leading to increased productivity, efficiency, and monitoring and reporting accuracy. In its initial scoping for a solution, Kayak Public Transit found a myriad of possible applications available at almost any budget and can be tailored to most any agency's needs.