The Alaska Legislature passed the state’s Capital Budget and adjourned on April 25. Legislators included several railroad-related items in the budget, not the least of which is $15 million to continue work on Positive Train Control (PTC) in 2015. This mirrors the amount Governor Parnell placed in his capital budget to advance work on a PTC system, which is required by federal law. Still under development, the new technology is designed to prevent rail accidents caused by some human errors, such as moving too fast or into unauthorized rail segments. Additionally, the legislature appropriated $13 million to the Mat-Su Borough for the Port MacKenzie Rail Extension. The budget also includes $3 million to the Alaska Department of Transportation for Alyeska Highway Pedestrian Safety at the railroad crossing in Girdwood, and $375,000 to the Municipality of Anchorage for drainage improvements at the West Northern Lights railroad overpass.

**STATE PROVIDES CRITICAL PTC FUNDING**
Lawmakers approve more than $30 million for rail-related projects

In late April, railroaders from Bridge and Facilities maintenance departments joined forces to replace the concrete perimeter of the 62-year old monument that showcases historic steam locomotive Engine #1. Dedicated in 1952, the monument is an important representation of Alaska Railroad history, and is frequently photographed. With work completed in time for the 2014 passenger season, the popular marker will look its best in countless pictures for years to come.

**MONUMENT MAKEOVER FOR ENGINE 1**
Maintenance crews repair historic marker’s concrete perimeter
During 2013, the Destination America Channel featured the Alaska Railroad in a 6-part series that was so popular, program producers are pursuing another season. The film crew arrived in Alaska in February and will remain through mid-May as they seek material for 8-10 more Railroad Alaska episodes featuring a new set of stories.

Railroad Alaska debuted late last year to the 60 million subscribers of the Destination America Channel (a Discovery Network channel), whose executives said the series was the most viewed premiere in the channel’s history. After a full run on Destination America, Railroad Alaska re-ran to the 97 million subscribers of the Animal Planet channel. When it debuted in Europe, it was the most watched premiere on Discovery UK and many other European Discovery channels. It’s no wonder Discovery asked Windfall Films to produce a second season, which is expected to air this fall.

The Northern Rail Extension’s (NRE) first phase — the Tanana River bridge and levee at Salcha — is slated for completion in July. At 3,300 feet, the bridge will be Alaska’s longest. Phase One remains on schedule and within the $188 million budget. Planning for a public ribbon-cutting ceremony is underway, with the date tentatively set for August 5. Invitees include Alaska’s congressional delegation, governor, legislature, interior community officials and the military — all having been highly instrumental in the project’s success. With the bridge and levee in place, the four-phase NRE project will next focus on Phase Two: constructing a rail link between existing rail infrastructure (North Pole) and Salcha. Future phases will complete the 80-mile extension to Delta Junction.

By late April 2014, steel girders stretch across 19 piers to the other side of the Tanana River.

The first steel girder is set upon piers 6 and 7 in October 2013. Since then progress continues at a good speed to keep the project on target for completion in July 2014.
Train engineers have remarkable control over fuel efficiency with steady and smooth techniques that extract more miles out of each gallon of diesel. Few techniques are smoother than coasting, says veteran Engineer Frank Sheppard, who mentors student and newer engineers at the Alaska Railroad.

Along stretches of undulating track, engineers can use gravity to pick up speed going downhill and to slow down while climbing uphill. Meanwhile, the throttle remains in the idle position and this constitutes coasting. Experienced engineers like Sheppard can coast over one-third of the some 350 miles between Anchorage and Fairbanks. Sometimes more. “I average 118 miles of coasting,” said Sheppard. “My personal record is 155 miles on a northbound train.”

Fuel savings can be dramatic. To illustrate, when an SD70MAC engine is idling (or coasting), it burns about six gallons per hour. At full throttle, the locomotive burns 168 gal/hr. The cost of diesel is more than $3/gal, so when an engineer coasts four to five hours of the 12-hour trip between Anchorage and Fairbanks, per-train savings are hundreds, if not thousands, of dollars.

In addition to mentoring by veteran engineers, train crew supervisors also employ ARRC’s newest teaching tool — a locomotive simulator — to enhance conservation coaching. Purchased in 2013, the simulator mimics an SD70MAC cab, with real time data displays that show in-train forces, brake pressure, train position and operating indicators, such as fuel efficiency and speed.

An SD70MAC records information about a train movement. These recordings can be uploaded into the simulator for playback, allowing supervisors to teach how to handle trains in the safest and most fuel-efficient manner. Students can review areas of improvement from watching their own train runs, or they can see best practices in action by reviewing the runs of an experienced engineer. Given savings from conserved fuel and in-house training capability, ARRC expects to recoup the $357,500 cost of the simulator in less than five years.

Veteran Train Engineer Frank Shepard demonstrates how to operate the SD70MAC locomotive simulator. Inset: Located behind the simulator operator’s seat, the Engineer Supervisor sits with access to a monitor that shows simulated locomotive energy demand factors, such as acceleration, horsepower, fuel used and fuel efficiency.
RESTORATION COMPANY COMMISSIONS ARTWORK

Historic Engine 557 restoration non-profit sells exclusive art print as fund-raiser

The Engine 557 Restoration Company commissioned an original oil painting as the basis for a limited edition fine art print that premiered at 5:57 p.m. sharp during a First Friday event on May 2, at the Anchorage Historic Depot. The event featured nationally-recognized artist J. Craig Thorpe, along with the non-profit 557 restoration organization’s all-volunteer mechanical crew. Based in Washington (where the 557 was kept for nearly 50 years) Thorpe specializes in landscapes and transportation illustration. Repeat rail-related clients include Amtrak, Holland America Line, and Southeast Alaska’s White Pass & Yukon Route.

The Engine 557 Restoration Company’s 2014 print is titled Extra 557 Returning. The scene depicts the historic steam locomotive and train returning to Anchorage from a special (extra) run to Seward. The title also anticipates the actual return of the 557 to these rails. Proceeds from the sale of the prints will go directly to the Alaska Community Foundation 557 Restoration Fund to be matched by funds from the $350,000 Rasmuson Grant. Money is dedicated to the engine’s rehabilitation. Prints are available for Internet orders only through the Alaska Railroad’s Online Gift Shop at http://alaskarailroadgiftshop.com/store/.

For more information about the print or the locomotive restoration effort, contact Restoration Company President Pat Durand at sewtrain557@gmail.com.