

APWA Public Works **Project of the Year Award**

August 31, 2018

New Franklin Boulevard
Phase 1





1. GENERAL DESCRIPTION OF THE PROJECT

Franklin Boulevard is a vital transportation link between Downtown Springfield and Eugene and serves as a gateway to both communities, along with the University of Oregon and the Glenwood neighborhood. The City of Springfield's objective in re-designing and re-constructing Franklin Boulevard as a multi-modal transportation facility was to support the redevelopment of Glenwood as a vibrant place to live, work and visit and to provide an improved arterial connection between Springfield and Eugene.

The Franklin Boulevard Redevelopment Project is transforming the facility from an outdated state highway into a modern urban multi-way boulevard that safely serves the needs of pedestrians, cyclists, drivers, and supports public transportation options including buses. The project will also have a catalytic effect on land redevelopment in the Glenwood Riverfront District that includes properties along the boulevard.

Beginning in 2007, Springfield worked with its agency partners and stakeholders to analyze possible improvements to Franklin Boulevard to support redevelopment and new investment in the Glenwood Riverfront. In 2008, the Springfield City Council endorsed a hybrid multi-way boulevard conceptual design and directed staff to refine the concept and integrate it into the Glenwood Refinement Plan update. This Refinement Plan update engaged the community in re-envisioning land use, infrastructure, and open space in Glenwood. In 2012, the Council adopted the Refinement Plan, including establishment of a corridor envelope and design policies for Franklin Boulevard. In 2014, Council agreed to proceed with design and construction of the project.

The City of Springfield received State and Federal funding to complete the required environmental analysis for the entire corridor, 15 percent design of the entire corridor, and preliminary engineering, construction engineering, and construction for Phase 1 (from McVay Highway to Mississippi Avenue). The final design of Phase 1 was completed in January 2017, and Phase 1 construction was completed in May 2018 (4 months ahead of schedule).



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To make this Redevelopment Project possible, the City had to accomplish the following key milestones:

2004: The Glenwood Urban Renewal Plan helped provide basic infrastructure for the Glenwood area including the underdeveloped riverfront area as well as for vacant and underutilized industrial sites.

2008: The Franklin Boulevard Study considered and evaluated improvements to Franklin Boulevard. The improvements included arterial and multi-way boulevard options. The study area extended from Interstate 5 to the west, Springfield bridges to the east, Willamette River to the north and Nugget Way to the south. The City Council endorsed a hybrid multi-way boulevard concept.

2009: The City applied for a Tiger Grant in hopes of receiving funds for the environmental analysis, design and construction of the project. While the City did not receive this grant award, it did help advance the project idea and leveraged other funding sources.

2012: The City adopted the Glenwood Refinement Plan. The purpose of the plan is to provide background information and policy direction for public and private decisions affecting the growth and development of the Glenwood area.

2013: Franklin Boulevard was annexed into the City of Springfield. Properties adjacent to city limits (i.e. Franklin Boulevard) may request annexation into the City. The City and consultant staff worked on the required environmental analysis and preliminary design.

2014: The Federal Highway Administration (FHWA) and Springfield City Council approved the project footprint. Detailed design for Phase 1 began.

2015: The City applied for and did not receive a Tiger VII Grant for the design and construction of phase 2, (from Mississippi Avenue to Glenwood Boulevard). The City is developing new funding strategies.





2. COMPLETION DATE CONTAINED IN CONTRACT. ANY TIME EXTENSIONS GRANTED SHOULD BE ADDRESSED IN THE SUBMITTAL:

The contract completion date was September 20, 2018. The project was completed approximately 4 months early and was open to the public on May 24, 2018.

3. CONSTRUCTION SCHEDULE, MANAGEMENT, AND CONTROL TECHNIQUES USED:

The construction schedule was a living document as the team looked at ways to be as efficient as possible throughout the project. Traffic control plans were evaluated as the construction was phased. Initially there were four stages to the construction. Through continual process improvement, one of the stages of construction was eliminated saving considerable time and contributing to the project's completion four months ahead of schedule.

Construction project meetings were held on a weekly basis where the team discussed safety, quality control, traffic control, utilities, public outreach, submittals, RFI's, potential change orders, any potential impacts or delays, and a 2 week look ahead schedule. This allowed for the team to stay well-coordinated, foresee any potential future problems, and address any questions or concerns. The meeting attendees included the contractor's project manager and superintendent, the City's project manager and inspector, and the consultant's project manager, inspector, and quality control representative.

Stage 1: A detour for the turn movements was developed, and a temporary eastbound link was built so the outer elements of the roadway could be built.



Stage 2: Once the concrete was ready for traffic, the traffic was shifted to the outside and work on the access lane and the roundabout internal construction was able to start.



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Stage 3: When the access lane was complete, the last westbound lane was built which allowed for the contractor to build their way out of the internal elements of the roundabouts from west to east.



Another element that saved time on the project was having the City's project manager on-site to provide immediate answers to contractor questions. Additionally, community engagement aided in keeping the construction process running smoothly with the City project manager being in regular communication with business and property owners and the community at large. Communication was sustained at a high level throughout the entirety of the project and included emails, phone calls, in-person meetings, and e-updates.





4. SAFETY PERFORMANCE INCLUDING NUMBER OF LOST-TIME INJURIES PER 1,000 MAN HOURS WORKED AND OVERALL SAFETY PROGRAM EMPLOYED DURING THE CONSTRUCTION PHASE:

Throughout the project there were zero accidents. The goal of the safety program was for everyone to go home at the end of their shift without having had an accident. The key elements that made achieving this goal successful included awareness, prevention, and remedial action. The contractor's safety plan, Wildish Safety Policy and Program, was used as the guiding document to achieve the success of zero accidents during the project.

5. COMMUNITY NEED – A SUMMARY OF HOW THE PROJECT MET THE COMMUNITY NEEDS AS RELATED TO ECONOMIC CHALLENGES, VALUE ENGINEERING, CREATIVE USE OF RESOURCES, TO THE MEASURABLE BENEFIT TO THE COMMUNITY:

The project met a range of community needs, as follows:

• The hybrid multi-way boulevard design incorporated a blend of street design concepts to accomplish a fundamental goal of vehicular movement while also creating a pedestrian-friendly environment through on-street parking, slower traffic, and enabling buildings closer to or at the right-of-way line; as well as providing access to high-capacity transit service and a protected bike facility;



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• Design makes all transportation modes safer, more attractive, and more convenient – offering more options to commuters, access to development, and more recreational opportunities;



• Saved valuable developable land by designing and constructing a double roundabout instead of one large roundabout;





• Phased the design and construction of the entire corridor project to more easily facilitate securement of funding. The overall estimated cost presented economic challenges and by breaking the entire project into phases allows the City to show the success of phase 1 to secure funding for remaining phases; and



• High-capacity transit stations adjacent to roundabouts with an exclusive lane entering the roundabout.





6. SUSTAINABLE PRACTICES – USE OF ALTERNATIVE MATERIALS, PRACTICES, OR FUNDING THAT DEMONSTRATES A COMMITMENT TO SUSTAINABILITY:

The project implemented a number of sustainable practices:

- All of the stormwater runoff is 100 percent managed on-site through three large infiltration rain gardens, numerous stormwater planters adjacent to sidewalks, lengthy median stormwater planters, and pervious concrete in the access lane. Stormwater management practices for the facility meet the needs of healthy rivers and ecosystems;
- · Native landscaping elements reduced the impervious area of the project;







- Decorative lighting fixtures were used throughout the project. These fixtures were recycled from San Diego and retrofitted to include LED lighting as LED lighting has been demonstrated to be more energy efficient and cost effective; and
- Concrete was chosen for the project surface to minimize overall maintenance and extend the life of the facility.







7. ENVIRONMENTAL CONSIDERATIONS INCLUDING SPECIAL STEPS TAKEN TO PRESERVE AND PROTECT THE ENVIRONMENT, ENDANGERED SPECIES, ETC., DURING THE CONSTRUCTION PHASE:

The project took the following steps to preserve and protect the environment during the construction phase:

- Removed trees in compliance with the Migratory Bird Act;
- Employed erosion control measures including silt fences and inlet protection; and
- Used asbestos abatement process for the 6 buildings that were demolished.

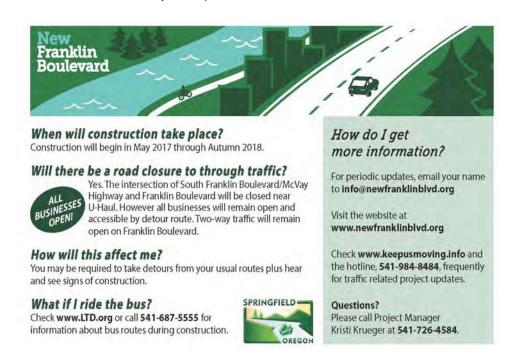




8. COMMUNITY RELATIONS – A SUMMARY OF THE EFFORTS BY THE AGENCY, CONSULTANT AND CONTRACTOR TO PROTECT PUBLIC LIVES AND PROPERTY, MINIMIZE PUBLIC INCONVENIENCE AND IMPROVE RELATIONS:

Community engagement dating to 2004 has been a crucial component of this project, and the City has continued to listen to, address, and update business owners, property owners, and the traveling public through the construction phase as well. Key elements of the communication plan implemented during design and construction were:

- Frequent in-person visits and phone calls between City project manager and corridor property/ business owners;
- Provision of consistent, reliable information and City contact information;
- Mailings to property/business owners/area residents;
- E-Updates to Interested Parties list;
- Website, http://newfranklinblvd.org with comment function and specific Public Involvement page, http://newfranklinblvd.org/public-involvement/;
- Timely response to all submitted comments and questions;
- · Project information displayed at local high-visibility locations;
- Media (print, radio, TV) to reach commuters;
- Electronic Message Boards placed in nearby roadways; and
- Flyer outreach to low-income, elderly, and persons with disabilities.







Changes are coming to Franklin Boulevard

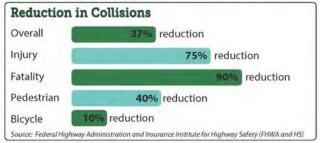
Franklin Boulevard is going to be rebuilt. Design and engineering for the McVay Roundabout is underway with construction anticipated in 2016 and 2017.

- No residences will be displaced by the road design and construction.
- There will be a separated bike facility and new sidewalks on both sides of the road.

The **vision for Glenwood** is a mixed-use neighborhood, with housing and businesses, and good transportation options, including bus, bicycle, walking, and motor vehicles.



Why use a modern roundabout?





Safer for Everyone

Modern roundabouts are the safest at-grade intersection. Pedestrians cross shorter distances and deal with traffic at slower speeds.



Saves Time

By yielding at the entry rather than stopping to wait for a green light, delay is reduced by as much as 89%.



Costs Less

Modern roundabouts eliminate traffic signals and fewer accidents decrease public and private costs.



Better for the Environment

60% less greenhouse gas is produced due to reduced idling and delays, fuel consumption, and air pollution.



Aesthetic Value

The central island provides an opportunity for landscaping and art, and there are fewer above ground wires and poles.



Construction of the multi-way boulevard design begins with the McVay double roundabout (far right). The rest of the project will be implemented as funds are available.



Final outreach piece:





9. UNUSUAL ACCOMPLISHMENTS UNDER ADVERSE CONDITIONS, INCLUDING BUT NOT LIMITED TO, ADVERSE WEATHER, SOIL OR SITE CONDITIONS, OR OTHER OCCURRENCES OVER WHICH THERE WAS NO CONTROL:

Unusual circumstances the project encountered during construction included:

- Higher amounts of asbestos were found than expected throughout the buildings that were demolished to enable construction;
- · Contaminated soils were identified and remediated; and
- Drunk drivers as well as a high speed chase that ended at the project site.





10. ADDITIONAL CONSIDERATIONS YOU WOULD LIKE TO BRING TO THE ATTENTION OF THE PROJECT REVIEW PANEL SUCH AS INNOVATIONS IN TECHNOLOGY AND/OR MANAGEMENT APPLICATIONS DURING THE PROJECT. INCLUDE A DESCRIPTION OF SPECIAL ASPECTS OF THE PROJECT:

Additional special aspects of the project included:

- The purchase of land from 22 properties, relocation of 3 businesses, demolition of 6 buildings, and 2 buildings that were cut and refaced due to the right-of-way needs of the project;
- A SWAT training that was able to be held prior to the buildings being demolished;





• Exclusive bike/ pedestrian facilities as well as green pavement markings which provide a higher degree of safety compared to placing bicycle facilities in the roadway;



• Black powder coated signs and light poles that aided in aesthetic uniformity, eye level signs, and stamped truck aprons which all help in providing a sense of place which is important for the redevelopment of the riverfront;







• A portable Rectangular Rapid Flashing Beacon (RRFB) which was used throughout the project. The RRFB was moved to areas of greatest need throughout the project as construction advanced to address pedestrian safety during the project;



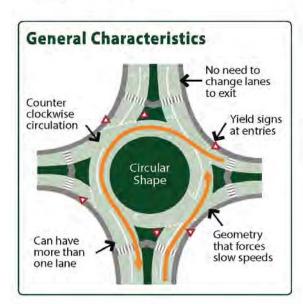
- Permanent RRFB's were installed at the multi-lane crossings at the roundabouts to increase the visibility of pedestrians at the roundabouts;
- Design adjustments were made to enable property access in the short term while not compromising ultimate design; and

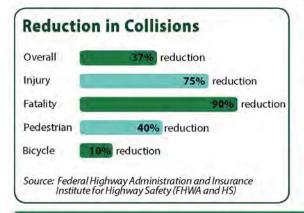


• Inclusion of modern roundabout designs in lieu of traffic signals which have been shown to be the safest form of traffic control at intersections.

Modern Roundabouts

Modern roundabouts are accepted as one of the safest types of intersection design, and have been used effectively throughout the world for many years. They reduce crashes, delays, fuel consumption, air pollution, neighborhood speeds and costs, while moving more traffic and enhancing intersection beauty.







Safer for Everyone

Modern roundabouts are the **safest at-grade intersection**. Pedestrians cross shorter roadway distances, and deal with traffic traveling at slower speeds and moving only one direction at the crossing point.



Saves Time

By yielding at the entry rather than stopping to wait for a green light, delay is reduced by as much as 89%. This means less fuel consumed, which also lowers drivers' costs.



Costs Less

Modern roundabouts eliminate traffic signals, which could save between \$5,000-\$10,000 per year per intersection. Fewer accidents also decrease public costs for emergency response, and private costs for medical attention and car repairs.



Better for the Environment

60% less greenhouse gas is produced when using modern roundabouts due to reduced idling and delays, lower speeds, and decreased fuel consumption and air pollution.



Aesthetic Value

The central island provides an opportunity to beautify the intersection with landscaping and art, and there are fewer above ground wires and poles.



Appendix Before and After Pictures of Project Area



Before Photos:















After Photos:

















Photo by Dave Lamb at A1 FlyCam