

Oregon Task Force on AI - Applications Work Group (Use case examples)

| Program Areas | Example 1 | Example 2 | Example 3 | Example 4 | Example 5 |
|--|--|---|---|---|---|
| Health/Human Svcs | Predictive Analytics for Disease Prevention and Management | Personalized Care and Treatment Plans | Health and Social Services Integration | Fraud Detection and Program Integrity | Telehealth and Virtual Care Assistance |
| Public Safety | Predictive Policing and Crime Prevention | Surveillance and Threat Detection | Emergency Response Optimization | Natural Disaster Prediction and Management | Social Media Monitoring for public safety |
| Criminal Justice | Risk Assessment and Recidivism Prediction | Automated Evidence Analysis | Crime Mapping and Hotspot Identification | Natural Language Processing for Legal Document Review | Bias Detection and Fairness Monitoring |
| | Mental Health and Behavioral Assessment | Automated reporting and Case Management | Facial Recognition and Biometric Identification | | |
| Transportation | Autonomous Vehicles/Self-Driving Vehicles | Traffic Management and Optimization | Predictive Maintenance for Vehicles and Infrastructure | Intelligent Public Transportation Systems | Logistics and Supply Chain Optimization |
| Employment/Unemployment | AI-Driven Job Matching and Recruitment | Skills Gap Analysis and Training Recommendations | Predictive Analytics for Labor Market Trends | Automated Unemployment Claims Processing/Fraud Detection | Employee Retention and Attrition Prediction |
| Housing/Homelessness | Predictive Analytics for Homelessness Prevention | Optimizing Resource Allocation and Service Delivery | Personalized Housing and Support Service Matching | Fraud Detection and Eligibility Verification for Housing Programs | Data-Driven Policy Development and Impact Assessment |
| | AI-Driven Rent Control and Affordability Analysis | Virtual Assistance for Housing Services and Benefits Applications | Predictive Maintenance for Housing and Shelter Infrastructure | | |
| Natural Resource Management/Regulation | Sustainable Land Use planning and zoning | Predictive Analytics for Natural Disaster Mitigation | Water Resource Optimization and Management | Wildlife Protection and Conservation | Environmental Monitoring and Compliance |
| Education | Personalized Learning and Adaptive Learning Systems | Intelligent Tutoring Systems | Automated Grading and Assessment | Learning Analytics for Data-Driven Decision Making | AI-Enhanced Administrative Processes |
| | Student Support and Career Guidance | Language Learning and Translation Support | Accessibility for Inclusion for Special Education | Classroom Management and Student Engagement | AI in Research and Higher Education |
| Financial Svcs/Insurance | Credit Scoring and Risk Assessment | Automated Customer Support and Chatbots | Fraud Detection and Prevention | Claims processing and underwriting | Personalized Financial Planning and Wealth Management |
| Taxation | Fraud Detection and Tax Evasion Prevention | Automated Tax Filing and Error Detection | Predictive Analytics for tax collection | Taxpayer assistance through AI-powered chatbots | Tax Audit Automation |
| Technology Innovation | Predictive Analytics for R&D | Automated Design Optimization | Enhanced Product Development | Intelligent Resource Allocation | AI-Powered Collaboration Platforms |
| AI development | Automated Code Generation | AI Model Optimization | Data Augmentation and Synthesis | Bias Detection and Mitigation | Continuous Learning and Adaptation |
| Biometrics | Biometric Identity Verification in Financial Transactions | Emotion recognition (facial recognition or physiological data) | Biometric Surveillance in Workplaces | Biometric access control for critical infrastructure | Biometric-based border control and immigration |
| Critical Infrastructure (e.g. Electric Grid, etc.) | Autonomous operation of power grids | Autonomous management of water supply and wastewater | Cybersecurity for critical infrastructure | AI-Driven control of industrial automation on manufacturing | Automated Dams and Flood Control systems |
| | Air Traffic Control for national aviation | Autonomous operation of Oil and Gas Pipelines | Automated Traffic Management in Transportation Networks | | |

- **Note: Examples provided through a ChatGPT prompt. Results should be verified**
- **Prompt: "List the 10 most common terms and definitions related to artificial intelligence in [insert program area/category] use cases. Provide a description of the use case and source information."**