

**Driving Forces:**

- 1.Stakeholder Support (DOT and State Agencies)
- 2.User Demand
- 3.Technological Feasibility
4. Scalability Goals
- 5.Agile Development Process



**Project Goal:**

Develop a scalable, user-friendly mobile application that provides real-time, optimized travel routes, integrates with state emergency systems, and supports DOT feedback collection, accommodating 250,000 users by year one and one million by year two, within three 15-day sprints.



**Restraining Forces**

- 1.Tight Development Timeline
- 2.Complex Integrations
- 3.User Privacy Concerns
- 4.Scalability Challenges
- 5.External Dependencies

Product Backlog Agile Risk Register  
Project: Mega City Commuter Application Development

#	User Story	Cause	Event	Impact	Risk Owner	Probability Risk Rating	Impact Risk Rating	Risk Score	Trigger	Response
1	2	Dependency on third-party traffic data systems	Failure to deliver route within 15 seconds	Delays in user route planning, reduced adoption	Development Team	4	4	15	Route calculation exceeds 15 seconds	Implement fallback data sources and caching mechanisms
2	5	Complex integration with diverse state emergency systems	Incompatibility or delays in alert delivery	Commuters miss critical alerts, regulatory non-compliance	Development Team	3	5	15	Alerts fail to display during testing	Engage state agencies early to define APIs; test integrations in sprint 1
3	3	Privacy requirements for anonymizing user data	Failure to comply with privacy regulations	Legal issues, user distrust	Development Team	3	3	9	Privacy issues flagged in testing	Apply privacy-by-design principles; consult legal team in sprint 1
4	1	Ambiguous or invalid user input	Input validation fails, causing app crashes	Poor user experience, reduced reliability	Development Team	2	2	4	App crashes during input testing	Implement robust input validation and user prompts
5	4	Differences in Apple/Android platform requirements	App fails to deploy or update correctly on one platform	Inconsistent user experience across devices	Development Team	2	2	4	Deployment errors reported in app stores	Test across multiple devices and OS versions in sprint 2
Current as of: 07/25/2025						Total Risk Score		47		

Probability Risk Rating		Impact Risk Rating
5: High		5: High
4: High to Moderate		4: High to Moderate
3: Moderate		3: Moderate
2: Moderate to Low		2: Moderate to Low
1: Low		1: Low