Business Model Canvas

Designed via AltexSoft BMC Tool

Key Partnerships

- IoT hardware vendors
- Government regulatory bodies
- Metro infrastructure firms and integrators
- Universities/research labs for testing and R&D
- Data storage and cloud service providers

Key Activities

- Sensor deployment and calibration
- Software development for dashboard and analytics
- Data modeling and anomaly detection
- User training and onboarding
- Continuous system improvements

Key Resources

- SHM sensors (vibration, tilt, strain, temperature)
- Data processing algorithms (AI/ML)
- Dashboard platform (web/mobile)
- IoT and wireless communication hardware
- Technical installation and support teams

Value Propositions

- Early detection of structural fatigue or failure
- Increased commuter safety
- Real-time dashboard with GPS-tagged issue reporting
- Automated alerts for high-risk structural anomalies
- Reduced inspection and downtime costs
- Improved asset lifecycle and maintenance planning

Customer Relationships

- Dedicated B2G/B2B account management
- Training and onboarding for staff
- 24/7 monitoring support
- Regular system updates and maintenance contracts
- Feedback loops from field engineers

Channels

- Direct sales to metro rail authorities
- Public-private partnership tenders
- Industry expos & smart transportation forums
- Website & demo video platform
- Pilot programs in select metro systems

Customer Segments

- Metro rail corporations (public & private)
- Urban transportation authorities
- Structural engineers and maintenance teams
- Safety and compliance regulators
- Infrastructure investors and consultants

Cost Structure

- Sensor R&D and procurement
- Software development and cloud hosting
- Customer acquisition and support
- Field technician training and deployment
- Legal, compliance, and certification costs

Revenue Streams

- Subscription for dashboard and analytics access
- One-time sensor installation and configuration fees
- Maintenance and support packages
- Custom integration and feature development