Software Requirements Specification for Results America

Version 1.0

Date: July 21, 2025

1. Introduction

1.1 Purpose

This document provides a detailed description of the requirements for the "Results America" web application. Its purpose is to serve as a guide for development, outlining the system's features, capabilities, and constraints. The platform is designed to allow users to explore, compare, and analyze performance data for U.S. states and the nation as a whole.

1.2 Scope

The application will provide a user-friendly interface for accessing a database of performance metrics across several key categories (e.g., Economy, Public Safety). Users will be able to sign up for an account, select specific metrics, compare multiple states, view national data, and save their preferences. The scope also includes inferred requirements for an administrative backend to manage the application's data and user base.

1.3 Definitions, Acronyms, and Abbreviations

- **SRS:** Software Requirements Specification
- **UI:** User Interface
- **Supabase:** The backend database provider used for data storage.
- **Measure:** A specific performance metric (e.g., "Violent Crime Rate").
- **Category:** A grouping of related measures (e.g., "Public Safety").
- **Vital Few:** A curated set of key performance indicators.

2. Overall Description

2.1 Product Perspective

The Results America application is a self-contained, data-driven web platform. It is built using the lovable.app framework and relies on a Supabase database for its data. It is intended to be a public-facing tool for researchers, policymakers, journalists, and citizens.

2.2 User Classes and Characteristics

1. **Public User (Unauthenticated):** Can browse the application but may have

limited access to features like saving favorites.
2. **Standard User (Authenticated):** Can create an account, log in, and access all user-facing features, including saving favorite states and measures.
3. **Administrator (Inferred):** A privileged user responsible for managing the application's data, users, and overall health via a secure backend interface.

2.3 Operating Environment

The application must be a responsive web application, accessible through modern web browsers (e.g., Chrome, Firefox, Safari, Edge) on desktop and mobile devices.

2.4 Design and Implementation Constraints

- The application must use the Supabase backend for all data storage and retrieval.
- The front-end is built on the lovable.app platform.
- The system must clearly indicate when it is displaying "mock data" versus live data from the database.

3. System Features (Functional Requirements)

3.1 User Registration and Authentication

- **3.1.1:** The system shall provide a sign-up page where a new user can create an account using a name, email address, password, and a selected home state.
- **3.1.2:** The system shall allow registered users to log in and log out.
- **3.1.3 (Inferred):** The system shall include a mechanism for password recovery (e.g., "Forgot Password").

3.2 Data Exploration and Filtering

- **3.2.1:** The main menu shall provide multiple entry points for data exploration: State, Nation, Category, Measure, and Vital Few.
- **3.2.2:** When exploring by state, the user shall be able to select up to four states to compare simultaneously. An option to select no states shall default to viewing all states.
- **3.2.3:** The system shall allow users to filter data by predefined categories (e.g., Economy, Public Safety, Health).
- **3.2.4:** After selecting a category, the user shall be able to select a specific measure to view.
- **3.2.5:** The UI shall provide informational tooltips listing the sub-metrics included within each category.

3.3 Data Visualization and Display

- **3.3.1:** The system shall display data for selected states in side-by-side

comparison cards.

- **3.3.2:** Each data card shall clearly display the state/nation, the measure name, and the unit of measurement (e.g., "per 10,000 people", "% change from prior year").
- **3.3.3 (Inferred):** The system should provide graphical representations of the data (e.g., bar charts, line graphs over time) to enhance comparability and analysis.

3.4 Data Export and Sharing

- **3.4.1:** The system shall provide a function to Export Data from the current view.
- **3.4.2 (Inferred):** The export function should support common formats like CSV and PDF.
- **3.4.3:** The system shall provide a Share function that generates a unique link to the user's current data view.

3.5 Personalization

- **3.5.1:** Authenticated users shall have access to a My Favorites section.
- **3.5.2:** Users shall be able to save specific states and measures to their favorites for quick access.

4. Inferred Administrative Features (Backend)

4.1 Admin Dashboard

- **4.1.1:** The system shall have a secure, login-protected administrative dashboard, inaccessible to standard users.
- **4.1.2:** The dashboard shall provide at-a-glance statistics, such as new user sign-ups and total active users.

4.2 Data Management

- **4.2.1:** Administrators shall have a UI to manage the data categories and measures presented in the application.
- **4.2.2:** This includes adding, editing, or deleting measures and ensuring they are correctly mapped to the underlying Supabase database tables.
- **4.2.3 (Inferred):** Administrators shall have a mechanism to trigger or monitor the data import/update process from external sources.

4.3 User Management

- **4.3.1:** Administrators shall be able to view a list of all registered users.
- **4.3.2:** Administrators shall have the ability to perform actions such as resetting a user's password or deactivating an account.