

HB 1329
4-11-25
Mock

NORTH
Dakota Be Legendary.

NOTIONAL COST ESTIMATE

K-12 GOVERNMENT SPEND DATABASE & SOLUTION

Disclaimer: This is not a quote from Guidehouse, but instead a requested operation, management, and development estimate.

Prepared for: North Dakota Information Technology

Prepared by: Guidehouse

Guidehouse POC: Rachel D'Hollander, rachel.dhollander@guidehouse.com

Month Prepared: April 2025

K-12 FINANCIAL REPORTING DATABASE AND COLLECTION

SOLUTION DESIGN AND DEVELOPMENT

Quote Overview

The prepared quote on the right depicts the design and development cost to create the solution for collecting, centrally storing (statewide), and creating the analytic interfaces to review results.

Included Costs in Estimate

- Design and development of the solution (first release)

Excluded Costs

- Ongoing operations and maintenance
- Program administration by DPI
- Report preparation and submission by LEAs

See the supporting Excel model for greater line item detail and assumptions on the buildup around each task and highlights key assumptions that impact costing inputs. Changes to the complexity of data collection and consumption will have a converse impact on the estimates provided below.

*rates are blended.

| | Vendor Labor Costs | Contractor Rate* | NDIT Rate* | Contractor Hours | NDIT Hours | Cost |
|--------|------------------------|------------------|------------|------------------|------------|-----------------|
| 1 | Requirements Gathering | \$239.20 | \$115.00 | 420 | 320 | \$ 137,264.00 |
| 2 | Solution Architecture | \$239.20 | \$115.00 | 80 | 120 | \$ 32,936.00 |
| 3 | Data Collection | \$239.20 | \$115.00 | 4260 | 980 | \$1,131,692.00 |
| 4 | Data Engineering | \$239.20 | \$115.00 | 940 | 640 | \$ 298,448.00 |
| 5 | Consumption Interface | \$239.20 | \$115.00 | 430 | 120 | \$ 116,656.00 |
| Totals | | | | 6130 | 2180 | \$ 1,716,996.00 |

KEY ASSUMPTIONS

- 1 Required data exists or can be generated by individual school districts.
Strong assumption; issues with data access and collection will have a large impact on feasibility and cost
- 2 No existing centralized data source that can be leveraged.
- 3 No currently existing data collection infrastructure.
- 4 Data will be provided by individual districts through flat files.
- 5 Individuals providing data will need an intuitive interface for submission.
- 6 Data collection layer may require development of custom interfaces and APIs.
- 7 Data consumption layer will be built using CoTS tools (e.g., Power BI) and will not involve development of custom web application.
- 8 Solution will leverage NDIT's Azure Platform (modern data platform).
- 9 Work may require data sharing agreements.
- 10 Work will be performed by a combination of contractors and North Dakota IT and business personnel.
- 11 Estimates for O&M costs will be considered separately.
- 12 DPI and SLDS (I/A) effort to manage the collection process, communicate with LEAs, update data sharing agreements will be excluded.

DPI - K-12 Financial Reporting - Notional Estimate

Prepared for the North Dakota Department of Information Technology

Developed - April 2025

Disclaimer: This is not a quote from Guidehouse, but instead a requested operation, management, and development estimate.

This document provides greater line item detail and assumptions on the buildup around each task and highlights key assumptions that impact costing inputs. Changes to the complexity of data collection and consumption will have a converse impact on the estimates provided below. This estimate only covers design, development, and deployment. It does not cover operations and maintenance (O&M).

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Development Cost Estimates - Vendor

| # | Type | Blended Contractor Rate | Blended ND Rate | Contractor Hours | ND Hours | Cost Estimate |
|--------------------|------------------------|-------------------------|-----------------|------------------|----------|-----------------|
| Vendor Labor Costs | | | | | | |
| 1 | Requirements Gathering | \$ 239.20 | \$ 115.00 | 420 | 320 | \$ 137,264.00 |
| 2 | Solution Architecture | \$ 239.20 | \$ 115.00 | 80 | 120 | \$ 32,936.00 |
| 3 | Data Collection | \$ 239.20 | \$ 115.00 | 4260 | 980 | \$ 1,131,692.00 |
| 4 | Data Engineering | \$ 239.20 | \$ 115.00 | 940 | 640 | \$ 298,448.00 |
| 5 | Consumption Interface | \$ 239.20 | \$ 115.00 | 430 | 120 | \$ 116,656.00 |
| 6 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 7 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 8 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 9 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 10 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| Total | | | | 6130 | 2180 | \$ 1,716,996.00 |

Key Assumptions

Required data exists or can be generated by individual school districts. (this is a strong assumption; issues

- with data access and collection will have a large impact on feasibility and cost)
- No existing centralized data source that can be leveraged.
- No currently existing data collection infrastructure.
- Data will be provided by individual districts through flat files.
- Individuals providing data will need an intuitive interface for submission.
- Data collection layer may require development of custom interfaces and APIs.
- Data consumption layer will be built using CoTS tools (e.g., Power BI) and will not involve development of custom web application.
- Solution will leverage NDIT's Azure Platform (MDP).
- Work may require data sharing agreements.
- Work will be performed by a combination of contractors and North Dakota IT and business personnel.
- Estimates for O&M costs will be considered separately.
- DPI and SLDS (I/A) effort to manage the collection process, communicate with LEAs, update data sharing agreements will be excluded.

| # | Type | Blended Contractor Rate | Blended ND Rate | Contractor Hours | ND Hours | Cost Estimate |
|--------------------|--|-------------------------|-----------------|------------------|----------|---------------|
| Vendor Labor Costs | | | | | | |
| 1 | Consumption Interface Requirements Gathering | \$ 239.20 | \$ 115.00 | 120 | 100 | \$ 40,204.00 |
| 2 | Data Requirements Gathering | \$ 239.20 | \$ 115.00 | 100 | 60 | \$ 30,820.00 |
| 3 | Data Management Requirements Gathering | \$ 239.20 | \$ 115.00 | 40 | 40 | \$ 14,168.00 |
| 4 | Data Collection Requirements Gathering | \$ 239.20 | \$ 115.00 | 160 | 120 | \$ 52,072.00 |
| 5 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 6 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 7 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 8 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 9 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 10 | | \$ 239.20 | \$ 115.00 | | | \$ - |

| # | Type | Blended Contractor Rate | Blended ND Rate | Contractor Hours | ND Hours | Cost Estimate |
|--------------------|-----------------------------------|-------------------------|-----------------|------------------|----------|---------------|
| Vendor Labor Costs | | | | | | |
| 1 | Solution Architecture Development | \$ 239.20 | \$ 115.00 | 80 | 120 | \$ 32,936.00 |
| 2 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 3 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 4 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 5 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 6 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 7 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 8 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 9 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 10 | | \$ 239.20 | \$ 115.00 | | | \$ - |

| # | Type | Blended Contractor Rate | Blended ND Rate | Contractor Hours | ND Hours | High Estimate - Cost |
|--------------------|-----------------------------------|-------------------------|-----------------|------------------|----------|-------------------------|
| Vendor Labor Costs | | | | | | |
| 1 | Develop Standardized Templates | \$ 239.20 | \$ 115.00 | 200 | 60 | \$ 54,740.00 |
| 2 | Implement Data Collection Process | \$ 239.20 | \$ 115.00 | 3600 | 300 | \$ 895,620.00 |
| 3 | Training and Resource Development | \$ 239.20 | \$ 115.00 | 260 | 80 | \$ 71,392.00 |
| 4 | User Acceptance Testing | \$ 239.20 | \$ 115.00 | 80 | 240 | \$ 46,736.00 |
| 5 | Rollout | \$ 239.20 | \$ 115.00 | 120 | 300 | \$ 63,204.00 |
| 6 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 7 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 8 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 9 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 10 | | \$ 239.20 | \$ 115.00 | | | \$ - |

| # | Type | Blended Contractor Rate | Blended ND Rate | Contractor Hours | ND Hours | High Estimate - Cost |
|--------------------|--------------------------|-------------------------|-----------------|------------------|----------|-------------------------|
| Vendor Labor Costs | | | | | | |
| 1 | Data Model Development | \$ 239.20 | \$ 115.00 | 200 | 40 | \$ 52,440.00 |
| 2 | ETL Pipeline Development | \$ 239.20 | \$ 115.00 | 500 | 240 | \$ 147,200.00 |
| 3 | Automation & Scheduling | \$ 239.20 | \$ 115.00 | 240 | 360 | \$ 98,808.00 |
| 4 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 5 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 6 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 7 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 8 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 9 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 10 | | \$ 239.20 | \$ 115.00 | | | \$ - |

| # | Type | Blended Contractor Rate | Blended ND Rate | Contractor Hours | ND Hours | High Estimate - Cost |
|--------------------|--|-------------------------|-----------------|------------------|----------|-------------------------|
| Vendor Labor Costs | | | | | | |
| 1 | Wireframing | \$ 239.20 | \$ 115.00 | 80 | 20 | \$ 21,436.00 |
| 2 | Consumption Interface Development | \$ 239.20 | \$ 115.00 | 320 | 10 | \$ 77,694.00 |
| 3 | Consumption Interface Operationalization | \$ 239.20 | \$ 115.00 | 10 | 10 | \$ 3,542.00 |
| 4 | User Acceptance Testing | \$ 239.20 | \$ 115.00 | 20 | 80 | \$ 13,984.00 |
| 5 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 6 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 7 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 8 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 9 | | \$ 239.20 | \$ 115.00 | | | \$ - |
| 10 | | \$ 239.20 | \$ 115.00 | | | \$ - |