# Freight Needs Assessment

## **Overview of Needs Analysis**

MDOT defines freight as "any good, product, or raw material carried by a commercial means of transportation including air, highway, rail, water, and pipeline." The GVMC area is a rapidly growing metropolitan area with several freight centric industries and facilities which support the local economy.

The Infrastructure Investment and Jobs Act (also known as the Bipartisan Infrastructure Law) enacted on November 15<sup>th</sup>, 2021, continues the National Highway Freight Program to improve the efficient movement of freight on the National Highway Freight Network (NHFN) and support several goals including:

#### Freight Committee Members:

Founders Brewing Grand Rapid Chamber Kent County Road Commission MDOT Spartan Nash The Right Place, Inc. Watco (Grand Elk Railroad)

- Investing in infrastructure and operational improvements that strengthen economic competitiveness, reduce congestion, reduce the cost of freight transportation, improve reliability, and increase productivity.
- Improving the safety, security, efficiency, and resiliency of freight transportation in rural and urban areas
- Improving the state of good repair in the NHFN
- Using innovation and advanced technology to improve NHFN safety, efficiency, and reliability.
- Improving the efficiency and productivity of the NHFN
- Improving State flexibility to support multi-State corridor planning and address highway freight connectivity
- Reducing the environmental impacts of freight movement on the NHFN

GVMC will continue to work to target the relevant funds that align with achieving the goals of the MTP and continue to monitor new funding opportunities.

## **Process for Determining and Addressing Needs**

GVMC leans on a Freight Committee to understand the freight transportation related needs within the GVMC planning area. This Freight Committee is comprised of representatives from the Grand Rapids Chamber of Commerce, MDOT, Watco (Grand Elk Railroad), the Kent County Road Commission, Spartan Nash, and Founders Brewing. GVMC is actively working to connect with more local representatives in the logistics industry. Organizations representing rail, truck, and air freight/shipping interests are also included on GVMC's Public Participation mailing list and consultation list.

The freight committee first met on Monday, April 17, 2023, to discuss the Metropolitan Transportation Plan, previous freight planning efforts, and the previous needs and deficiencies list from the 2045 MTP. The committee reconvened on Tuesday, May 16<sup>th</sup> to update the needs list. GVMC relies on the committee members to suggest freight-related projects and often considers projects that improve roadway capacity to enhance freight access as well. The Freight Committee reviewed the needs list developed for the 2045 MTP to determine if the list of items were still needed, should be modified, or could be removed because they had been addressed. Members of the Committee then suggested new freight needs to be added.

Additionally, GVMC works to receive input from the public on their needs or concerns with the transportation system in our region. GVMC received four comments concerning freight in the 2050 Metropolitan Transportation Plan public survey. These comments address the concern for wear and tear of trucks on the roads and the number of commercial trucks traveling down rural roads.

## **Identified Needs**

#### Need 1: Bottleneck Areas

- US-131 between 28<sup>th</sup> St. and the S-Curve (has the oldest pavement in Grand Rapids and the highest traffic volumes per day outside of Detroit); the Hall St. /Martin Luther King Jr St./ Wealthy St. /Cherry St. area needs to be reconfigured due to closely placed interchanges and congestion issues.
- US-131 between Cedar Springs and I-196
- The need for a new bridge on Freeman Ave. over the CSX line/yard between Hall St. and Market Ave. (Primarily for truck traffic)
- Congestion from truck traffic generated from industry located between Market Ave., Cesar Chavez Ave., and Chicago Dr.
- M-6/ M-37 Interchange

### **Need 2: Safety and Operational Concerns**

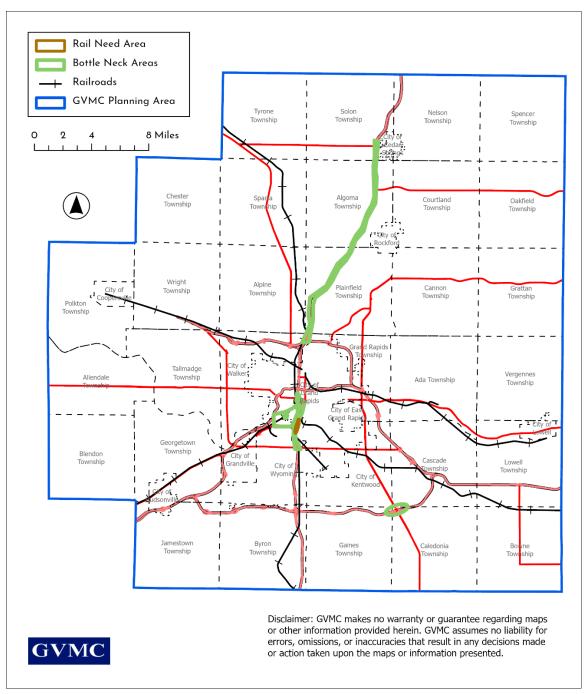
- Trucks traveling from US-131 to Hall to Godfrey alongside an elementary school. The City of Grand Rapids is trying to redirect truck traffic away from Cesar Chavez Ave.
  - o Additional local truck routing concerns throughout the region
- Clearing incidents on US-131 which can cause delays.
- Limitation on when refuse/waste trucks can access residential areas.
- Truck traffic entering I-96 on the Fruit Ridge and Walker Ave interchanges. (Commercial area between 4 Mile Rd./3 Mile Rd./ Fruit Ridge Ave./ Bristol Ave.)

#### **Need 3: Freight Rail Issues**

- The Watco railyard will continue to generate 24/7 truck traffic from the transload facility entering US-131
- There is desire for more intermodal rail service from Grand Rapids, but not currently enough volume to make it a priority for the Class 1 railroad(s) to build a new intermodal facility between Indiana and Grand Rapids

#### Need 4: Future/Other Concerns

- Connecting freight employers/employees to transit
- Monitor how potential tolling will fit in the future of transportation. (I-196 from I-94 to M-6 is currently listed in MDOT Tolling Study as a tier 1 corridor.)
- Freight traveling US-131 south from Big Rapids
- Commercial development around the I-96 and M-50 interchange in Lowell
- EV Corridor (*Electric Vehicle Corridor is a national highway corridor purposed for alternative fueling and electric vehicle charging*) and Truck Parking
- Hydrogen fuel cell technology



## **Costs to Address the Recommendations**

There are several approaches to address the list of needs determined by the Freight Committee and thus a wide range of estimations could be developed to determine the cost of these projects. The following includes the cost of delay from the current bottle necks and estimated project costs.

US-131 between 28<sup>th</sup> Street and the S-Curve is an identified bottleneck in the region that is currently undergoing an MDOT Planning and Environmental Linkages (PEL) Study to figure out solutions and costs. This segment experienced an average of \$1.17 million of commercial cost delay a year from 2019 through 2022.

US-131 between Cedar Springs and I-196 is also an important freight corridor that experienced an average of \$1.08 million commercial cost delay from 2019 through 2022.

M-6/M-37 interchange experienced \$159,765 commercial cost delay a year from 2019 through 2022.

US-131, the length of the GVMC planning area experienced an average of \$2.57 million of commercial cost delay a year specifically because of incidents from 2019 through 2022. (Incidents are defined as non-recuring events such as traffic crashes, disabled vehicles, highway maintenance, and special non-emergency events such as ball games or concerts).

Hall St. and Burton St. (connecting roads North and South of the CSX Transload facility to US-131) experienced \$159,765 commercial cost delay a year from 2019 through 2022.

Freeman Ave. Bridge over the CSX Rail needs a full cost analysis to include PE, CE, and ROW and specific size. MDOT cost estimation for a grade separation bridge is valued at \$343.20 per SFT. \*Number taken from 2022 Bridge Cost Estimate Worksheet with 2023 inflation assumption

The development costs of an intermodal facility vary on sight readiness from multiple factors, including condition of existing infrastructure, needs for development, and right of way. Previously, intermodal facility costs have ranged from \$13 million to \$104.1 million. The development of these facilities heavily relies on public funding. Funding sources for recent Intermodal Facility projects have included state DOTs and other state funds, local governments, SAFETEA-LU, and the TIGER Discretionary Grant.

(Commercial cost per VMT= delay per VMT\*commercial delay cost)