# Rerouting the Truck Route in Columbia County – Key Facts 11/30/22 DRAFT

**Objective**: To improve the health, safety, and quality-of-life outcomes for Columbia County residents, move the truck route away from densely populated neighborhoods with housing and amenities close to the road. Identify and move the truck route to the most cost-effective alternate route which reduces residential impacts for Columbia County residents.

**History:** As noted by Sam Pratt in his 7/14/22 <u>letter</u> to the Mayor and the Common Council, the intention has always been to phase out heavy trucks running through the city. *"The State Truck Route,"* he wrote, *"was going to be removed from Hudson in the 1950s, after the creation of the highway connecting the Rip Van Winkle Bridge and Bell's Pond."* The growth of truck size, weight and volume has only made moving the Truck Route more urgent.

## **Key Facts:**

- 1. The State Truck Route has been going through Hudson since before the 1950s, and the volume of trucks has dramatically increased over the years.
- 2. The size of trucks and truck loads today are significantly bigger than what they were in the 1950s and earlier.
  - A <u>study</u> cited by the NY Department of Transportation (DOT) showed that truck weights have increased by **three** to **four times** or more their weight from the 1950s to today. In 1955, average truck loads weighed between 4,940 22,140 lbs., compared to today's DOT truck weight limits that range between 14,400 to 80,000 lbs.
  - A <u>study</u> performed by the Association of American Railroads (AAR), in opposition to government proposals to increase truck weight limits, observed the following: "Currently, federal limits are 80,000 pounds GVW, 20,000 pounds on a single axle, and 34,000 pounds on a tandem axle group. Applications of the formula allow for up to seven axles and 86 feet or more length between axle sets, and a maximum load of 105,500 pounds." (Note: The 105,500 lb. reference indicates the maximum load a 7-axle vehicle can handle; the federal and NYSDOT weight limit is 80,000 lbs.)
- 3. The volume of trucks has significantly increased over time.
  - A <u>study</u> cited by the DOT notes: "Frequencies of freight-carrying vehicles weighing 30,000, 40,000, and 50,000 pounds or more reached a new high in 1955. Since 1936 the number of trucks in each 1,000 and empty vehicles weighing 30,000 pounds or more have increased almost 5 times; for 40,000 pounds or more, over 11 times; and 50,000 pounds or more, 25 times. From 1950 to 1955, the frequencies increased 10, 16, and 29 percent, respectively."

"Truck traffic is estimated to climb 131 percent from 281.6 billion ton-miles in 1960 to an estimated 651 billion in 1980..."

A significant factor for the City is increasing gravel truck volume since 2015 when a major gravel company bought the dock at Hudson's waterfront. From 2015 to 2019, average aggregate truck trips per day increased from 14 to 114 (over 800% increase in average trips per day) (Creighton Manning Truck Study, July 9, 2020). Proposed future volume is up to 284 truck trips per day.

#### 4. Federal and state laws limit truck weights base on vehicle size.

NYSDOT limits maximum weight load to 80,000 lbs., regardless of vehicle size.
Aggregate truck weight limits are up to four times higher than septage trucks: 80,000 lbs. for Class 9 and higher (e.g., aggregate trucks) vs. 19,501-26,000 lbs. for Class 6 (e.g., septage trucks).

#### 5. City streets are not designed to handle large trucks.

A June 2017 <u>article</u> in Urban Milwaukee, <u>"Murphy's Law – How Trucks Destroy Our Roads"</u> spelled out the difference: "An oft-quoted federal study once found that road damage from one 18-wheeler is equivalent to the impact of 9,600 cars. A fully loaded tractor-trailer weighs 80,000 pounds, 20 times more than a typical passenger car, at 4,000 pounds, but the wear and tear caused by the truck is exponentially greater."

### 6. The City has a significant volume of truck traffic flowing through its streets.

For example, during the 5-day study period (during October 2020) analyzed by MJ Engineering in its 2020 Truck Study for the City, MJ observed 1,678 daily truck trips throughout the City, recorded at 15 Automatic Traffic Recorder (ATR) locations. Trucks ranged in size from Class 6 to Class 14. It should be noted that this volume was during Covid, and presumably is higher in post-Covid times, today. Truck volumes by ATR location were as follows:

Table 1.a - Daily Average Trucks by ATR (include Aggregate trucks)						
	Daily	Daily Average				
	Average	Aggregate Trucks				
ATR	All Trucks	(% of All Trucks)	Location			
3	207	52 (25%)	ATR 3 – NY 23B, Columbia Turnpike – ATR located			
			between Becraft Ave and Spook Rock Rd			
6	47	26 (55%)	Columbia St – Between 3 <sup>rd</sup> and 2 <sup>nd</sup> street. (primarily			
			includes empty aggregate trucks returning from the Dock			
			to the Quarry on non-State Truck Route street; some			
			return gravel trucks are loaded) [Lower Columbia St]			
8	172	52 (30%)	NY 23B, Green St – Between Fairview Ave and Aitken			
			Ave			
10	270	52 (19%)	US 9, Green St between McKinstry Place and Fairview			
			Ave			
13	125	52 (42%)	Columbia St/23B between 4th and 3rd St [Upper			
		. ,	Columbia St]			
14	52	52 (100%)	Port Access Road			
Total	873	-				

There were nine other ATR locations included in the Truck Study, accounting for the following truck volumes, none of which included aggregate trucks:

Table 1.b - Daily Average Trucks by ATR (no Aggregate Trucks)				
	Daily			
	Average			
ATR	All Trucks	Location		
1	84	NY 9G/23B Overlap, S 3 <sup>rd</sup> Street		
2	154	US 9, Worth Avenue		
4	164	NY 66, Union Turnpike		
5	117	US 9, Fairview Avenue		
7	5	Columbia Turnpike		
9	20	Columbia Street (between McKinstry Place and Frederick St)		
11	31	Prospect Avenue		
12	139	US 9, Warren Street (between 8 <sup>th</sup> St and Park Place)		
15	91	State Street (300 Block)		
Total	805			

7. **The City-designated truck routes implemented in 1976 need to be rescinded and revised.** In 1976, the Police Department issued a Directive identifying six City-designated truck routes, which included four areas on the current Truck Route as defined by MJ Engineering. Areas of present-day concern that are <u>not</u> on the current Truck Route as

defined by MJ Engineering, and which have a significant volume of truck traffic, include lower Columbia Street (below 3<sup>rd</sup>), North Front St, north Dock St south to South Front St to City Line, and Park Place south to Warren St. These areas should be removed as Citydesignated truck routes, with the exception of Park Place as that could have the unintended consequence of redirecting more truck traffic to Columbia St with the current Truck Route in effect.

- 8. The 2020 City Truck Study conducted by MJ Engineering identified two viable alternate routes to the current Truck Route: Option 6 and Option 12. Information provided by MJ Engineering, and analysis of the routes, identified Option 12 as the preferred alternate route with significant benefits to reducing truck traffic in the City of Hudson, and has only 10 additional property impacts for Columbia County.
  - Option 12 would circumvent 12 of the 15 ATR areas in the City, which includes many problematic areas in the City (Columbia St, US 9 Warren St & Park Place, US 9 Worth Ave, etc.).

Option 12 has 102 residential properties, all but 10 of which are on the current Truck Route. This option would *reduce* the number of **residential** properties on the Truck Route by **140 overall**, and result in **10** new properties to the route.

Option 12 completely detours big trucks around the City, is the lowest cost option (estimated at \$1.4 million), and was the one most favored by survey participants in MJ Engineering's survey, with 69% choosing this option over four other alternate options.

- Option 6 would circumvent 9 of the 15 ATR areas, and does not circumvent the problematic US 9 Worth Ave or US 9 Green St routes which have a high volume of trucks. It would also create dangerous crossings at State Routes 9 and 9G between aggregate trucks and through-trucks. This option is more than double the cost of Option 12 at \$3.1 million. Option 6 has 66 residential properties in Greenport, all of which are on the current Truck Route, and for these properties there would be no change.
- 9. The current Truck Route has enormous residential property impacts to the City of Hudson, compared to the alternate routes identified by the City Truck Study. The table below provides information on the number of impacted properties and households along the current Truck Route. The number in red font below to be updated. I obtained Tax Map info for Park PI, Warren St and beginning of Worth Ave. May be helpful to obtain for all of Worth Ave.]

Residential Properties Along Truck Routes							
See Color	Aggregate Truck	Location	# of	# of			
Legend	Route?	Location	Properties	Households			
	Yes	Lower Columbia St (below 3 <sup>rd</sup> St)	48	536			
	V.	,	_	40			
	Yes	Front St	8	16			
	Yes	Upper Columbia St	49	83			
		(above 3 <sup>rd</sup> St)					
	Yes	Green St	52	61			
	Yes	Third St	12	19			
	No	Fairview Ave	37	37 <sup>2</sup>			
	No	Park PI, Warren St,	51	51 <sup>2</sup>			
		Worth Ave					
		Totals	257 <sup>1</sup>	803			

<sup>&</sup>lt;sup>1</sup> 242 of 257 properties are on the current Truck Route, and 56 are on City-designated routes.

**Legend:** ☐ Areas on City-designated truck routes; ☐ Areas on current Truck Route defined by MJ Engineering.

<sup>&</sup>lt;sup>2</sup> # of households is at least this number. Actual number is unknown.

The above table shows:

- The City Truck Study report showed 201 residential properties, and 41 mixed-use properties (residential/commercial) along the current Truck Route.
- The City of Hudson has approximately 191 properties, representing 737 households, on the current Truck Route (including lower Columbia St on the Citydesignated route), and the towns of Greenport and Claverack have at least 92 properties on the current Truck Route.
- 169 of all 257 properties are along routes traveled by aggregate trucks, to/from the Dock and the Quarry.
- 10. A comparison of <u>residential</u> impacts of the current Truck Route to alternate route options show significant reductions (improvements) with a move from current Truck Route to either Option 12 or Option 6, however, Option 12 has several advantages over Option 6, as noted earlier.

Number of Residential Properties Along Routes									
		Option 12 Route		Option 6 Route					
	Current Truck Route	Total Properties	New to Truck Route	Total Properties	New to Truck Route				
Columbia County - Residential	242 <sup>1</sup>	102 <sup>3</sup>	10	66 <sup>4</sup>	0				
Greenport/Claverack	At least 92 <sup>2</sup>	102 <sup>3</sup>	10	66 <sup>4</sup>	0				

<sup>&</sup>lt;sup>1</sup> Includes City of Hudson and parts of Greenport and Claverack.

[DRAFT - In process of verifying these numbers, and the numbers below. May increase a little]

Option 12 total properties of 102 includes 29 properties reported by MJ Engineering, of which 19 were on NY Route 66 (included Greenport and Claverack), and 10 were on Fish and Game Rd (Claverack). It also includes 73 additional residential properties that we researched and identified via Tax Maps that are on State Route 9H between Route 66 and Route 23. [Verifying these numbers; they may increase a little]

#### Impacts:

- Moving the Truck Route to Option 12 would reduce the number of impacted residential properties by 140 overall -- from 242 to 102, however, the vast majority are on the current Truck Route. Only 10 residences/households would be new to the route.
- Moving the Truck Route to Option 12 would **reduce** the number of impacted households by approximately **701**, from 803 total households to 102 Greenport/Claverack households, assuming most Greenport and Claverack homes are single family.
- Alternate Option 12 changes the number of impacted properties as follows:
  - Adds 10 additional properties in Claverack, located on Fish and Game Road, between NY Rte. 66 (Union Turnpike) and NY Route 9H. Most, if not all of these properties are set back from the road.

<sup>&</sup>lt;sup>2</sup> 92 are included in 242 number above and are on the current Truck Route.

<sup>&</sup>lt;sup>3</sup> 92 of 102 properties are on the current Truck Route.

<sup>&</sup>lt;sup>4</sup> All 66 are on the current Truck Route.

- Reduces the number of properties in the City of Hudson, which includes some of Greenport and Claverack, by 140 overall.
- 11. As reported by MJ Engineering in the City's Truck Study report, "The social and economic impacts of truck traffic upon the City's business district and neighborhoods are especially worrisome."

Further, MJ Engineering stated: "The community must contend with the particularly noxious influences of high truck volume such as noise, odors, dust, congestion, and visual degradation. In the City of Hudson, pedestrian traffic is very important to residents and visitors. Through truck traffic typically directly and negatively affects business and quality of life within the City. Diesel exhaust from truck traffic is a complex mixture of gases and fine particles. In an urban area such as Hudson, the narrow streets and tall buildings make it much harder for the gases and particles to dissipate in comparison to a rural setting with wider streets and less buildings. When the exhaust cannot dissipate, it causes an unhealthy environment for pedestrians in the city."

The above is particularly concerning when considering the number of residential properties and households in the City of Hudson on the current Truck Route (approximately 191 properties, representing 737 households).

As indicated previously in #9 and #10 above, moving the Truck Route to **Option 12** would **reduce** the number of impacted **residential** properties by **140**, and the number of impacted **households** by approximately **701**.

12. Air quality studies have found greater levels of harmful particulate matter (e.g., PM2.5 and PM10) concentrations in areas that have a higher volume of truck traffic. Also, Traffic-Related Air Pollution (TRAP) has been found to be considerably greater at homes in areas closest to the road traveled by trucks and other High-Emitting Vehicles (HEVs) that includes a range of vehicle types (e.g., small buses transporting people with disabilities, school buses, and large trucks traveling to and from local businesses south of the area).

In 2019, the NYS Department of Environmental Conservation (NYSDEC) conducted an air quality <u>study</u> of the Albany South End community in response to community concerns regarding air quality in this community. Similar to the City of Hudson's Columbia St area, Albany's South End community residents reported concerns about health, safety (due to their proximity to rail cars), odors, noise, vehicle speed, and heavy truck traffic. The Study positioned monitors in several areas, including an area that was on a major truck route, and an area not on a truck route.

The Study found via its fixed monitoring that particulate matter (PM2.5 and PM10) concentrations were greater at the location that had a higher volume of truck traffic, and that Traffic-related air pollution (TRAP) in the area was considerably greater. Also, NYSDEC portable monitoring found TRAP (UFP and BC) measured at homes in the area closest to the road was considerably greater than the rest of the area specifically due to HEVs from a range of vehicle types, including small buses transporting people with disabilities, school buses, and large trucks traveling to and from local businesses south of the area. The PM2.5 concentration at this test area was 13 percent greater than concentrations at the other area (without trucks), and this increase corresponded directly to the increase in morning truck traffic volume.

As a result of DEC's South End Air Quality Study, and directed by the then Governor, state agencies and local partners undertook new actions to reduce community exposure to truck pollutants. For example, DEC and DOT made \$20 million available from a Volkswagen settlement and other resources to fund clean trucks statewide, with a focus on environmental justice communities like the one tested (referenced above), and DEC is working with identified truck fleets to evaluate ways fleets can reduce emissions. DEC has allocated an additional \$52.4 million for future projects to replace transit, school, and paratransit buses statewide. This and other actions indicate the seriousness of the air quality pollution issue.

Conclusion: Moving Truck Route to Option 12 would be a huge benefit to Columbia County. Option 12 would substantially reduce the number of impacted residential properties and households in Columbia County, and be beneficial to the health, welfare, and safety, of individuals on the current Truck Route in the City of Hudson, with minimal to no impact to the towns of Claverack and Greenport.