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MEMORANDUM

To: Food Equity Alliance

From: Lon Hatamiya, President and CEO, The Hatamiya Group

Date: June 11, 2021

Re: Analysis of Economic Impact of Proposition 12 on Pork Pricing and Consumption in California

We were asked to provide an objective and independent analysis regarding the potential economic impacts of implementation of Proposition 12, *the Farm Animal Confinement Initiative* ("Prop 12"), specifically upon pork pricing and consumption in California. For purposes of this analysis, we have relied upon a recently completed academic investigation[1] ("Tonsor-Lusk Report"), which examines the sensitivity of pork pricing changes on consumers within 51 major markets across the United States.

SUMMARY

The Tonsor-Lusk report's objective was to determine how sensitive consumer pork purchasing behavior is to price changes across U.S. retail markets and six pork products (loin, ribs, shoulder, breakfast sausage, dinner sausage, and bacon). Most appropriate for our analysis, the California markets included in the report are Los Angeles, Sacramento, San Diego, and San Francisco/Oakland (which are both geographically and demographically representative of the diverse population of the state of California.)

Some of the Key Findings of the Tonsor-Lusk report <u>specific to California</u> are:

- **Pork purchases are primarily influenced by the price of pork.**
  Generally, when the price of pork increases in California, the demand for pork decreases. When the price of pork decreases, the demand for pork increases. For example, a 50% increase in pork prices in Los Angeles would cause an ***91.0% decrease in demand***; a 50% increase in price in Sacramento, an ***81.0% decrease in demand***; a 50% increase in price in San Diego, a ***79.5% decrease in demand***; and a 50% increase in SF/Oakland, a ***77.5% decrease in demand***.

- **Pork purchases are much more sensitive to pork's own price than the price of beef or chicken.**
  California consumers purchase pork based upon the price of pork and not in comparison with the price of other alternative protein sources, such as beef or chicken.

[1] "*Consumer Sensitivity to Pork Prices: A Comparison of 51 U.S. Retail Markets and 6 Pork Products*," Dr. Glynn T. Tonsor, Kansas State University, and Dr. Jayson L. Lusk, Purdue University, March 5, 2021

- **Per capita pork consumption varies across retail markets in part due to diversity in household characteristics and composition.**
  Although it may vary depending upon the product of pork (e.g. loin, shoulder, bacon, ribs, etc.), pork is an important, if not primary, source of protein for African American, Asian American, and Hispanic households, markets, and ethnic restaurants across the California markets considered. Most importantly, there is notable differences in pork demand across California markets and pork products.

- **The report includes demonstrative examples on how shifts in demographics, external shocks reducing pork availability, and external shocks increasing retail prices impact pork markets.**
  If a good's demand is elastic, then price and consumer expenditures move in opposite direction. Conversely if a product's demand is inelastic, then price and consumer expenditures move in the same direction. For pork in California, the demand is <u>elastic</u> for most products across all markets.

  As a result, things that increase pork prices (e.g. increased feed costs, increased production environment requirements, losses in production efficiencies, <u>increased government regulation</u>, etc.) will result in greater consumer expenditures and lower seller revenues. Moreover, higher pork prices will reduce the overall demand, or more simply, a consumer will have less to spend on other items if they are required to spend more on pork, also known as "consumer welfare".

  Additionally, if a state passes a law that excludes a large volume of pork production entering into the market (Prop 12 as an example), this will reduce availability to consumers, thus driving up price due to the lower availability of supply. For example, ***a 50% reduction in available bacon would result in 60% higher bacon prices in the Los Angeles market*; *a 50% reduction in available pork loin would result in 42% higher pork loin prices*.**

  Intuitively, when facing higher retail prices, consumers will buy a lower volume of impacted products at a higher price – clearly resulting in economic harm and impacting consumer welfare (meaning that consumers will have less to spend on other items, such as food, rent, utilities, etc.) Most specifically, a 50% retail pork price increase would result in ***consumer loss of $224.5 million annually in Los Angeles***; similarly, a ***$47.5 million consumer loss in Sacramento***; ***$46.5 million consumer loss in San Diego***; and ***$84.5 million consumer loss in SF/Oakland.***

CONCLUSIONS

The recently issued Tonsor-Lusk Report provides an important and quantifiable analysis of the impacts of increases of pork prices on the important California markets. Any instance that could increase the price of pork, specifically the creation of regulations to implement

Proposition 12, will result in greater consumer expenditures on pork and/or lower demand for the various pork products. Increased pork prices would have the combined negative impact of greater financial burden on California pork consumers and lower demand for pork products on pork producers. Moreover, more market access restrictions due to Prop 12 regulations would further limit available supply into California, thereby driving up pork prices for all consumers.

More specifically, the negative financial burden falls largely on the diverse ethnic consumers and communities that make up California, with pork being an important source of protein for African American, Asian American, and Hispanic households, businesses, and restaurants.