

VIRGINIA ISRAEL ADVISORY BOARD

COMMONWEALTH OF VIRGINIA
OFFICE OF THE GENERAL ASSEMBLY

Virginia Israel Advisory Board

Annual Report
FY 2021

December 31ST 2021

Mel Chaskin – Chairman

Chuck Lessin – Vice Chairman

Dov Hoch – Executive Director



Executive Director’s Message



Our strategy of Commonwealth-wide collaborations focusing on the strong synergies between Israel and Virginia came to fruition again this year as our economic impact studies cited \$5 billion contribution to the Virginia economy by Israeli companies analyzed by ODU’s Dragas Center for Economic Policy and Analysis. These contributions to Virginia’s GDP represent more than 20,000 times our budget and most satisfying to me are closely aligned with state policy objectives – many of which are in areas with unemployment and under-employment.

Next year, we will continue to conceptualize and catalyze significant Israeli investments in the Commonwealth and partnerships with Virginia companies then collaborate with private and public stakeholders to bring them to fruition - like the emerging venture investing \$228m that will create 200 jobs in Southwest Virginia.

5 billion economic impact by Israeli companies analysed by ODU’s Dragas Center for Economic Policy and Analysis.

Our cultural and educational undertakings also remained robust including covid-permitting face2face encounters. The highlight for me was a VIAB a gala evening at Taubman Museum of Art in Roanoke in the context of an exhibition of 36 Israeli artists (mostly woman and of all faiths), where in an on-stage conversation with the curator 150 attendees listened to me artfully talk about the Israeli context of the art.

In January in order to counter-the-cold, I look forward to developing warm relations with the new administration - specifically with the Secretaries of: Commerce and Trade; Agricultural and Forestry and Public Safety and Homeland Security all of whom we have had close working relationships in this past year.

Dov Hoch

Executive Director

Virginia Israel Advisory Board



Chairman’s Message



FY 21 has continued to be a challenging year due to COVID -19, but we were still able to accomplish many positive activities.

Some highlights meeting with Israeli Autonomous System Defense company likely to build manufacturing in VA and offices in NOVA doubling its workforce in 2021 from 2020.

VIAB continues with the Economic Impact Studies done by Old Dominion University, Dragas Center for Economic Analysis and Policy for Zim Shipping, Energix and Sabra Dipping showing that the 11 years economic impact on the Commonwealth of Virginia was \$ 6.1 billion contribution to the Virginia economy. This was over 30,000 times VIAB 2020 budget and 1500 times VIAB’s budget since inception and will continue as an on-going economic impact for the foreseeable future.

I am very grateful to our Executive Director, Dov Hoch, in accomplishing these and other economic advantages for Virginia during these challenging periods.

I would like to thank our Board members who provide a balanced presence throughout the Commonwealth and have contributed their time, contacts, and resources to advancing our mission.

Mel Chaskin
Chairman
Virginia Israel Advisory Board



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Executive Summary

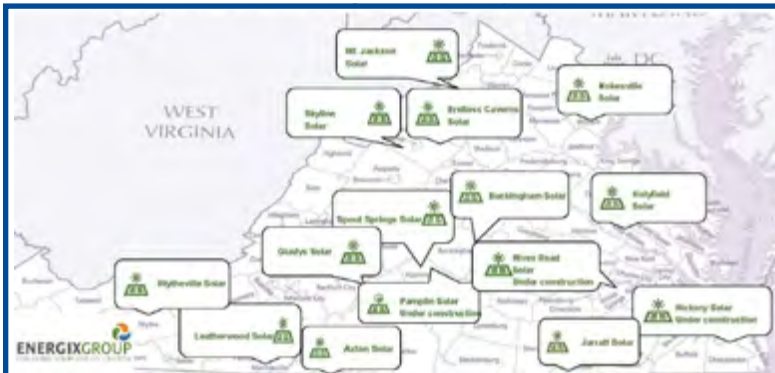
This year the VIAB accounted for growing Israeli ventures in Virginia that have an economic impact of more than \$5 billion (see Economic Impact Analysis conducted by the Dragas Center at ODU) and brought to fruition a project investing \$200 million – that is 1000 times the VIAB’s Budget more (See Pure Salmon).

Economic Impact Analyses – Israeli Company Case Studies

The Dragas Center for Economic Analysis and Policy in the Strome College of Business at Old Dominion University conducted case studies on the economic contribution of individual Israeli companies to Virginia’s economy. The economic impact is measured in GDP.

Professor Robert McNab, the Director of the Dragas Center for Economic Analysis and Policy and Professor of Economics in the Department of Economics in the Strome College of Business at Old Dominion University, conducted the research.

Energix (alone) had an economic impact exceeding 150 times the VIAB’s budget since Governor Northam took office.



Energix Renewable Energy

\$130m investment over the last two years rendered economic impact of \$33 million.

Economic impact = 150 times Virginia Israel Advisory Board’s annual budget.

[VIEW ENERGI X CASE STUDY](#)

COMPANY	ECONOMIC IMPACT	MULTIPLE OF VIAB BUDGET	YEARS ANALYSED / YEARS IN VA	DESCRIPTION
Zim Shipping	\$918,000,000	X4000	11/21	Only measures 50% of the years in VA
Oran Safety Glass	\$400,000,000	X2000	11/20	Manufacturing and US Sales Office
Energix	\$35,000,000	X150	2/4	Aligned With VA renewable Energy Policy
Sabra Dipping	\$5,200,000,000	X26,000	Analysed 2010-2020	Significant Ongoing Contribution
	\$6,553,000,000	X32,150		



Pure Salmon creating 200 jobs through a \$228m investment in Southwest Virginia

In 2012, the VIAB began leveraging the synergies between Israeli prowess in aquaculture / captive growth fish farming with Southwest Virginia's agricultural heritage and declining job prospects to develop a transformational project involving: \$228m investment on 200 acres that will create 200 jobs producing and processing 20,000 tons of salmon annually.

Throughout the undertaking Virginia Tech and the VIAB collaborated in both Israel and Blacksburg – including faculty to Israel; VIAB employing a graduate student to write a business plan at the Virginia Tech Corporate Research Center and a senior Aquamoaf executive coming to Vtech's campus for a year.

\$228m investment is 1000 times the VIAB's budget

Regional competition for Israeli business is becoming a factor. With direct flights from Tel Aviv to Dulles the region is getting more attention which might make larger pie while at the same time there are more players at the table:

- **Washington D.C. retained an Israel-based firm for the first time this year.**
- **Maryland changed management at their state funded Israel development arm and significantly outspends and out staffs Virginia in-state and in Israel.**

\$2m R&D Grants for Israel – Virginia Partnerships The Virginia Israel Advisory Board partners Israeli and Virginia commercial concerns to receive R&D grants with prospects of building joint ventures based in Virginia. This is part of our overall strategy of catalyzing every stage of the value chain to develop and grow ventures in Virginia. [30% of all US-Israel R&D Grants \(BIRD\) went to Virginia Israel partnerships in the first half of 2021.](#)

The Taubman Museum of Art (Roanoke) curated a four-month-long exhibit of 36 Israeli artists and graciously hosted a Virginia Israel Advisory Board gala evening with 150 guests enjoying conversations with the Curator and an after-hours gallery tour.

VIAB Thomas Jefferson: "Commerce with All Nations Award" acknowledging people and organizations who partner with the Virginia Israel Advisory Board in an on-going manner were: Legislative (Will Morefield) Education (Virginia Tech's David Kuhn) Industry / Commercial (Elbit Systems) and Cultural (The Taubman Museum of Art).

Israel Mountain, Virginia, is being developed into a 400 acre nature and agricultural preserve by a Charlottesville entrepreneur. The property will have Israel and Jewish elements & events including: Biblical Botanical trails modeled on Neot Kidumim in Israel; Israeli grape vineyard & winery, as well as, Jewish (e.g. Sukkot celebrations) and Israeli cultural / music events The Virginia Israel Advisory Board is helping to develop the Israel related components of Israel Mountain along with its founder Steve Morales



The Israeli companies analyzed represent a cross section of industries and locations throughout the Commonwealth and in most cases also built their U.S. headquarters in Virginia.

Oran Safety Glass – is a defense contractor with strong synergies to locate in Virginia’s federal agency ecosystem and is a core segment focus of ours. Governor Northam met with the Israeli Ministry of Defense when he was in Israel and twice invited Israeli defense delegations to Virginia. Oran Safety Glass also have senior a manager from Israel running their North American HQ in Arlington.

Energix – builds solar energy farms throughout Virginia which is aligned with and advancing the Commonwealth’s policy on renewable energy adoption. Energix also built its U.S. HQ in Arlington Virginia.

Zim – has its U.S. headquarters in Norfolk and significant shipping operations in and around the port.

Sabra – is an Israel global food conglomerate that after its establishment Colonial Heights became a joint venture with Pepsi Cola.

COMPANY	ECONOMIC IMPACT	MULTIPLE OF VIAB BUDGET	YEARS ANALYSED /YEARS IN VA	DESCRIPTION
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	\$6,553,000,000	X32,150		

Note: The analysis was conducted by a third party, state funded institution who also produce the State of The Commonwealth Report. The methodologies are all detailed in the reports and available on the Virginia Israel Advisory Board [web site](#). The researchers applied commonly accepted models. In every instance when there was an option to calibrate assumptions the researchers used the most conservative methods and models which outputted the lowest economic impact.



Pure Salmon creating 200 jobs through a \$228m investment in Southwest Virginia

In 2012, the VIAB began leveraging the synergies between Israeli prowess in aquaculture / captive growth fish farming with Southwest Virginia’s agricultural heritage and declining job prospects to develop a transformational project involving: \$228m investment on 200 acres that will create 200 jobs producing and processing 20,000 tons of salmon annually.

**\$228m investment is
1000 times the
VIAB’s budget.**



Virginia Tech and VIAB Collaboration

Conceptualized then catalyzed counties and economic developers to bring the venture to fruition

In 2012, The VIAB brought [Joe Marcy](#), Virginia Tech’s head of the Department of Food Science and Technology, to Israel to assess prospective technologies for aquacultural projects in Southwest Virginia. The trip focused on resolving the key issues of: how to mitigate environment problems from bio-waste, technical and business factors surrounding what type fish to grow and energy cost due to the need to heat water in in-door facilities whereas in Israel most farms are outdoors.



Vtech’s David Kuhn (Center) with former VIAB Executive Director Ralph Robbins and Speaker Fillercorn (former VIAB board member then Delegate) at Virginia Tech aquaculture facility.

Virginia Tech Associate Professor in the Department of Food Science and Technology [David Kuhn](#) later worked with the VIAB both in Israel and brought a senior manager from Aquamaof, the Israeli company whose RAS technology is the backbone of the venture, to Virginia Tech in Blacksburg for a year to work on the project. Dave continues his active involvement today leveraging the venture to develop water treatment training programs at a community college whose graduates will also qualify to work on public water systems.

Virginia Tech Corporate Research Park worked with a Virginia Israeli Advisory Board to develop a business model for the venture

A Virginia Tech graduate student funded by VIAB to researched the project and also met Aquamaof in Israel.



Key public sector contributors that made it happen:

Virginia Coalfield Economic Development Authority (VCEDA). Jonathan S. Belcher Executive Director/General Counsel earmarked \$10m for the project early on which was a significant confidence builder for Aquamoaf to locate the venture in Southwest Virginia.

Delegate Will Morefield (D3) at every phase of the undertaking was an enthusiastic believer and an on-going juggernaut to get things done. Including traveling to Israel and being a life force for the project at every juncture and decision gate.

Tazewell County Administrator C. Eric Young and Chairman of the Tazewell County Board of Supervisors, Tom A. Lester, Jr., Chairman, shepherded the project for eight years and remain involved today.

This undertaking exemplifies the Virginia Israel Advisory Boards approach of identifying synergies between Israeli innovation and technological prowess and the strengths and assets of Virginia. We work closely with government bodies at every level (State VEDP, CIT; regions/counties/cities) to enable private sector undertakings which are aligned with the Commonwealth's policies. Other like undertakings include:

- **Energix invested more than \$130m in solar farms throughout Virginia in concert with the Commonwealth's sustainable energy goals. Energix also built their U.S. headquarters in Arlington (See Economic Impact study in this report and [on our site](#))**
- **ZIM, Israel's largest shipping company, whose U.S. HQ in Norfolk employs 300 people (See Economic Impact study in this report and [on our site](#))**
- **Israel Aerospace Industries, Israel's largest defense contractor, whose CEO met with Governor Northam in Israel after expanding their U.S. Headquarters in Fairfax County. (See Press Release on our Site)**



Delegate Will Morefield (D3)



Tazewell County Administrator
C. Eric Young



The Taubman Museum of Art: Exhibition of 36 Israeli Artists

The Taubman Museum of Art in Roanoke curated a four-month-long exhibit of 36 Israeli artists and graciously hosted a Virginia Israel Advisory Board Gala evening with 150 guests enjoying conversations with the Curator, after-hours gallery tour and dinner

[Visions of Place: Complex Geographies in Contemporary Israeli Art](#) offers a unique lens through which to view and better understand the complexities of Israel, as well as a vehicle for examining themes central to humanity and society, including ethnicity, religion, geographical boundaries, and identities.

The exhibition is broadly organized around geography, which, in all its many manifestations—physical, personal, religious, political, historical, economic—is an inescapable part of Israeli life, psyche, and art. Half the artists are women with others from many different backgrounds, including: Arab artists who are Muslim, Christian, and Druze. (From the Museum’s exhibition material)

The Exhibition was funded by the Sam & Marion Golden Helping Hand Foundation.



Thomas Jefferson’s “Commerce with all Nations” Award

The Virginia Israel Advisory Board acknowledges people and organizations who partner with the Virginia Israel Advisory Board in an on-going manner. The award ceremonially cites Thomas Jefferson’s: “Commence with all Nations”

This year’s recipients include a broad range of Commonwealth-wide institutions: legislative (Will Morefield) Educational (Virginia Tech’s David Kuhn) Industry / Commercial (Elbit Systems) and Cultural (The Taubman Museum of Art). The Virginia Israel Advisory Board collaboration with these and like concerns vindicates the value they place on our undertakings and our activities’ alignment to the Commonwealth’s public policy goals.



Elbit Systems of America NASDAQ: ESLT acquired Roanoke-based Harris Night Vision for \$350m and consequently have grown the work force to nearly 600 people. Governor Northam met with the Elbit’s CEO in Israel and presented commonwealth workforce development resources in order to counter the usual result of shedding labor force after an acquisition. The award was present at the at a VIAB event at the Taubman Museum of Art in Roanoke.

Delegate Will Morefield who shepherded and activity advocated for [VIAB project Aquamoaf / Pure Salmon](#) at every phase of the undertaking - including traveling to Israel and being a life force for the fish farming project which involves \$228m investment and the creation of 200 jobs in Southwest Va.

David Kuhn, Virginia Tech Associate Professor in the Department of Food Science and Technology, who traveled to Israel and later brought to Blacksburg a senior manager from Aquamaof / Pure Salmon venture to develop the [transformational undertaking investing \\$228 that will support 200 jobs in Southwest Virginia](#). A special appreciation for Dave’s on-going commitment to the venture until today.

The Taubman Museum of Art for curating an [Exhibition of 36 Israeli artists](#) for four-months and gracious hosting a Virginia Israel Advisory Board Gala evening with 150 guests enjoying conversations with the Curator, after-hours gallery tour and dinner.



\$2m R&D grants for Israel – Virginia Partnerships

The Virginia Israel Advisory Board partners Israeli and Virginia commercial concerns to receive R&D grants with prospects of building joint ventures based in Virginia. This is part of our overall strategy of catalyzing every stage of the value chain to develop and grow ventures in Virginia - including working with the Virginia Manufacturer's Association to partner Israeli and Va. business, as well as, arranging R&D funding for new products to be manufactured in Va.

Two Virginia companies: X-Analytics (with Israeli partner, Cyberint) and Mil-SAT (with Israeli partner, Oversat), were funded by the [US-Israel Bi-national R&D Foundation - BIRD](#) a total of 2m of which \$1m was invested in the Commonwealth. Israel-Virginia partnerships received 30% of the overall U.S. funding this cycle – further vindicating the strong tech synergies between Israeli and Virginia companies.

Virginia Tech and Waves Audio (Tel Aviv, Israel) received BIRD funding in the past to development of an innovative electrostatic speaker using a nanoscale active membrane based on graphene achieving significant energy savings.

VIAB hosts the BIRD Foundation at our Virginia events to inform Virginia companies about the grants.

- **Cyberint Technologies (Petach Tikva, Israel) and Secure Systems Innovation Corporation, DBA X-Analytics (Arlington, VA) received \$1m to develop an operational cyber threat intelligence capability to inform cyber risk financial decisioning.**
- **Over-Sat (Netanya, Israel) and MIL-SAT (Surry, VA) received \$1m to develop a LEO Satellite End-User Mobile Terminal capable of tracking multiple satellites.**
- **Virginia Tech in the past, received a \$1m BIRD grant and partnered with Waves Audio (Tel Aviv, Israel) to development of an innovative electrostatic speaker using a nanoscale active membrane based on graphene achieving significant energy savings.**
- **[30% of all US-Israel R&D Grants \(BIRD\)](#) went to Virginia Israel partnerships in the first half of 2021.**

The BIRD Foundation promotes collaborations between U.S. and Israeli companies in various technological sectors for joint product development. In addition to providing conditional grants of up to \$1 million (up to \$1.5m for exceptional projects), the Foundation assists by working with companies to identify potential strategic partners and facilitate introductions.



Projects submitted to the BIRD Foundation are reviewed by evaluators appointed by the National Institute of Standards and Technology (NIST) of the U.S. Department of Commerce, and the Israel Innovation Authority.



Open Innovation Program - Virginia companies access Israeli Tech

Israel has the most people and highest per capita spending in R&D in the world, as a result many leading U.S. tech company (Apple, Google, Intel, Microsoft) have a significant R&D centers in Israel.

The Virginia Israel Advisory Board works with the largest Virginia companies to access technology in Israel through a range of models including: investments; acquisitions; partnerships and conducting proof of concepts. These relationships provide VA concerns with a competitive advantage that grow the companies and their Va. based workforce. See the [VIAB Open Innovation Program](#)

VA COMPANY	ISRAEL PARTNER	PARTNERSHIP TYPE	SECTOR	DESCRIPTION
Mars Co.	JVP	Technology Access	Food	Sourcing Tech with Israel VC
Altria	Green Smoke INC	Acquisition	Vaping	\$110m Via Nu Mark LLC
Carillon Clinic	ALIVE VC	Investment	Healthcare	Access Israel Healthcare Companies
VA Bio+Tech Park	Cupron	Investment & R&D	Life Science	Several New Companies in VA (EOS LICENCE)
Capital One	Multiple	Investment & Partnerships	Financial	Riskified, Source Defence, Lightico

Leading U.S. tech companies (Apple, Google, Intel, Microsoft) have a significant R&D centers in Israel. (PWC)

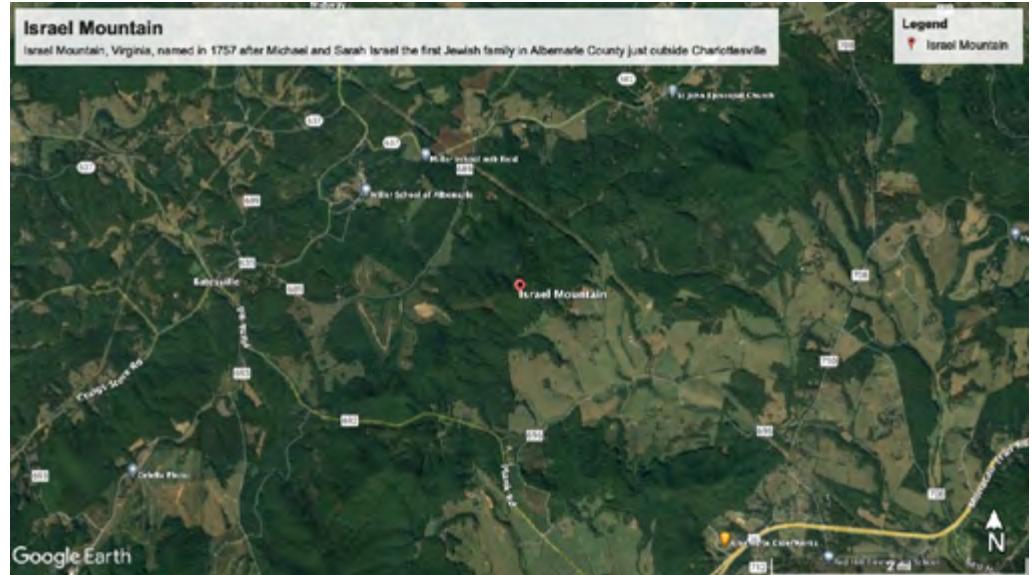
In the company year, we will focus on partnering Israel (i) smart city companies with the Innovation Campus in National Landing in concert with Amazon and the Virginia Tech Innovation Campus and (ii) work with Virginia Tech on Smart Mobility / Auto-tech initiatives. In addition, we are working with 20 commercial concerns in Virginia using various models to help them access Israeli Innovation.



Israel Mountain Virginia - Nature and Cultural Center

Israel Mountain, Virginia, named in 1757 after Michael and Sarah Israel the first Jewish family in Albemarle County just outside Charlottesville, is being developed into a 400 acre nature and agricultural preserve, by a local entrepreneur. The property will have Israel and Jewish elements & events including: Biblical Botanical trails modeled on Neot Kidumim in Israel; Israeli grape vineyard & winery, as well as, Jewish (e.g. Sukkot Celebrations) and Israeli cultural / music events.

The Virginia Israel Advisory Board is helping to develop the Israel related components of Israel Mountain along with its founder Steve Morales.



Solomon Israel in 1758 obtained grant, number 32, of 82 acres in Albemarle County, VA. his son Michael Israel and wife Sara Graves were contemporaries of Thomas Jefferson and the first Jewish people to settle Albemarle County, Virginia.



Israel Mountain, Virginia, named in 1757 after Michael and Sarah Israel, Albemarle County just outside Charlottesville,

steve@IsraelMountainFarm.com

www.IsraelMountainFarm.com

<https://www.facebook.com/IsraelMountainAdventure>



Next Year's Focus:

Next year, we will continue to conceptualize and catalyze \$100m undertakings throughout the Commonwealth then collaborate with private and public stakeholders to bring them to fruition. We have several Israeli defense and unmanaged systems companies in our pipeline with strong prospects of investing in manufacturing facilities and opening new offices as a result of the Israeli defense delegations we brought to Virginia.

Regional competition for Israeli business is a significant factor. With direct flights from Tel Aviv to Dulles the region is getting more attention which might make larger pie while at the same time there are more players at the table:

- **Washington D.C. retained for the first time an Israel-based firm this year.**
- **Maryland changed management at their state funded Israel development arm and significantly outspends and out staffs Virginia in-state and in Israel.**

Our approach to counter the competition will be to leverage public resources in NOVA and increase our collaboration with:

- **Fairfax County who have budgets and dedicated inbound business development staffers in-county and in Israel.**
- **Arlington to increase the presence of Israeli companies in the ecosystems surrounding the National Landing Innovation Campus's of Virginia Tech and Amazon.**
- **Virginia Tech on the industry and application specific segments: Smart Mobility; Unmanned Systems; Agriculture and Food Science; Quantum Computing and Cyber Security.**

VA. Student Israel Internship programs – We will continue to roll-out university internship programs in which students work with Israeli companies for real world experience with the goal of having 500 students each semester participating in the Tamid Group Program. Currently forty UVA students perform research with/for Israeli companies. Student consultants also participate in summer internships in Israel with the most exciting and innovative companies. (e.g. WAZE, WhatsApp).



Next Year's Focus:

Richmond Ballet - Israel Residency and Minds in Motion program in Israel - Re-start this long-standing program (after a Covid hiatus) that brings Jewish and Muslim Israeli grammar-school students together and bridges understandings with their parents. Supported by the Jewish Federation of Richmond.

Washington Wizards – collaborate with Monumental Sports’ management on events at Capital One Arena involving Israeli basketball player Deni Avdija, the 20 year-old former Maccabee Tel Aviv, forward who was a 1st round pick in the NBA Draft and started playing for the Washington Wizards in December 2020. [Deni Avdija's Highlights From His Rookie Season So Far](#)



Israeli basketball player Deni Avdija, forward who was a 1st round pick in the NBA Draft started playing for the Washington Wizards in December 2020

Virginia Tech – continue our collaboration with multiple faculties and institutes shifting our focus from the Blacksburg campus to Virginia Tech’s Innovation Campus in National Landing.



VIRGINIA TECH™



ParaZero Israeli drone safety systems company and Virginia Tech Mid-Atlantic Aviation Partnership (MAAP) conclude research for FAA rules for drone to flyover of cars.

Virginia Tech’s impact labs study provides State Farm® an FAA waiver to fly over moving vehicles.

Using a drone equipped with a ParaZero drone safety system, which includes a parachute to limit the velocity of crash, researchers showed “that a small parachute-equipped drone won’t actually damage a car traveling at average in-town speed limits,” (State Farm press release).

ParaZero Israeli drone safety systems company and [Virginia Tech Mid-Atlantic Aviation Partnership \(MAAP\)](#) conclude research for [FAA rules for drone to flyover of cars.](#)

In January - Our first undertaking will be to meet and develop working relationships with the new administration specifically with the Secretaries of: Commerce and Trade; Agricultural and Forestry and Public Safety and Homeland Security.