



July 20, 2017

AV1 GROUP, INC.
(OTC – AVOP - \$0.1399)



AV1 GROUP, INC. Shares Primed to Jump From Current Levels

Rob Goldman
rob@goldmanresearch.com

July 20, 2017

AV1 GROUP, INC. (OTC – AVOP - \$0.1399)

Price Target: \$0.75

Rating: Speculative Buy

COMPANY SNAPSHOT

AV1 Group, Inc. is an investment and holding company that incubates funds and supports emerging growth companies, and disruptive businesses. The Company seeks models and businesses displaying revolutionary concepts which can make a substantial footprint in high growth markets. AV1 Group's business model also delivers internally-created projects that are poised for revenue generation, and a cross-company revenue platform enabling it to incubate and foster growth in early stage subsidiaries under one umbrella.

KEY STATISTICS

Price as of 7/18/17	\$0.1399
52 Week High – Low	\$0.54 - \$0.017
Est. Shares Outstanding	53.7M
Market Capitalization	\$7.5M
Average Volume	198,674
Exchange	OTCPK

COMPANY INFORMATION

AV1 Group, Inc.
 7660-H Fay Avenue, Suite 312
 La Jolla CA 92037
 Web: <http://av1group.com/>
 Email: info@av1group.com

Brokers and Analysts
 Chesapeake Group
 410-825-3930
info@chesapeakegp.com

INVESTMENT HIGHLIGHTS

Through strategic acquisitions and careful incubation and support, AV1 Group owns diversified businesses in some of the world's largest and fastest growing markets. These include the Smart Cities, LED lighting, and U.S. cannabis industries.

With key signature wins in recent months and strong prospects in the pipeline, it appears that AVOP's flagship Smart Cities subsidiary could generate as much as \$18M in revenue in 2017 and enjoy huge growth in 2018. The 49% purchase of an innovative lighting company could prove to be a sleeper in 2018 and beyond.

Leveraging its early mover advantage, cross-development strategies, M&A activity and numerous domain assets, AVOP is poised to emerge as a niche segment and thought leader in the cannabis arena. Cannabis-centric LED lighting products and a unique, patented cutting-edge dental cleansing tool could lead to AV1 becoming a household name in the industry.

AVOP also owns the largest online vaping marketplace in the category, which boasts more than 800 products.

We believe AVOP is significantly undervalued at current prices. Based on the Smart Cities/LED flagship alone, AVOP should be worth \$0.40+, when compared with key peers. Thus, the cannabis and other businesses are essentially thrown in for free despite being worth an estimated tens of millions. We rate these shares Speculative Buy with a \$0.75 price target.

COMPANY OVERVIEW

In our view, **AV1 Group, Inc. (OTC – AVOP – \$0.1399 – Speculative Buy)** is set to enjoy a substantial increase in market value. AV1 Group is an investment and holding company that acquires, incubates and supports companies strategically positioned in emerging, high growth markets, or those that have developed disruptive technologies. Its portfolio of companies may be best characterized as operating in 3 categories: *Smart-Cities/LED Lighting, Cannabis Infrastructure, and Diversified Cannabis*. Management has engaged in a clever approach that fosters cross-pollination of its subsidiaries' products and markets. Its corporate structure and management style also allows for the ease of product development and M&A in the appropriate silos. Moreover, this approach promotes and advances the future sale of leading subsidiaries at favorable prices.

Smart Cities/LED Lighting

Smart City projects are urban development efforts to integrate new IT and communications technology resulting in a more efficiently management and provision of city assets/services. The market is enormous (slated to reach \$1 trillion globally in 2019) and AV1 Group is right in the thick of it. Acquired in 1H17, the Company's *XFIRE Smart Systems* has been awarded 3 lucrative contracts with more in the offering. The 49% ownership in Intelligent Lighting could prove to be a major game changer as its patented flagship product could increase light bulb life by 14 years while substantially reducing energy consumption. Leveraging its LED lighting expertise across industries, the Company boasts 2 subsidiaries in its Marijuana Incubator Group.

Cannabis Infrastructure

AV1 Group is one of the first publicly traded cannabis investment companies. The U.S. cannabis market is projected to enjoy a tremendous 30% CAGR with revenue slated to leap from \$6.7B in 2016 to \$22.6B in 2021. Given its early-mover advantage, this category boasts numerous highly correlated businesses and domains designed to provide critical information for businesses, professionals and consumers. These include: *MJIQ*, an enterprise-grade software suite in beta, domains designed to generate B2B in key verticals to companies in the industry (legal, accounting and real estate), sources of key information for consumers along with investment-centric cannabis domains. Management aims to be a critical service provider to growers and retail outlets. The Marijuana Incubator Group includes *CannaLighting and GrowthSpectrum*.

Diversified Cannabis

The Dent Group subsidiary, which features the revolutionary "*Dental Cannatizer*" could emerge as a sleeper product and flagship company-owned product in the space. The patented cutting-edge dental cleansing tool can provide superior results due to its revolutionary design and the integration of hemp oil infusing replacement cartridges. Another major holding is *Vapor High USA*, an 800-product strong ecommerce site is the largest online marketplace in the vaping category. In an attempt to leverage and dominate marketing and branding in the dental category, the Company also owns a series of domains specializing in this segment.

We believe that these shares are grossly undervalued on a price/multiple basis and a basic sum of the parts analysis. Clearly, the Street has overlooked and/or undervalued the swift progress in the Smart City/LED Lighting space, which could result in \$15-18M in revenue this year alone. Plus, 2018 should witness hockey-stick type growth as the cannabis businesses begin to comprise a larger share of revenue. Thus, we rate these shares Speculative Buy with a \$0.75 price target.

INDUSTRY OVERVIEW

AV1 Group, Inc. participates in 3 primary high-growth end-markets: Smart Cities, LED Lighting and Cannabis. Not only are these markets projected to experience tremendous growth rates but they each represent large market opportunities for AV1 Group, and its subsidiaries.

Smart Cities

According to a recent report issued by Persistence Market Research, the global Smart Cities market is forecast to leap from \$622 billion in 2016 to more than \$1 trillion in 2019 and \$3.5 trillion in 2026. Smart City projects are urban development efforts to integrate new IT and communications technology resulting in a more efficient management and provision of city assets/services through the use of raw data and predictive analysis. The deployment of sensors and other information and communication technology infrastructure across a municipal network fosters improvement in safety, efficiency, economics, and quality of life for residents.



Figure 1: Sample Smart City Features
 Source: Nokia

Leading urban renewal and revitalization planning firms target the drivers behind the implementation of smart cities as climate change, public finances, ageing populations, need to improve liveability, governmental economic restructuring, etc. Cities that have initiated Smart City projects include Columbus, Ohio, New York, Amsterdam, Madrid, Seoul, Barcelona, Manchester, and many others.

The early stages of smart city technology deployment typically centers on enhancing and upgrading transportation and traffic, energy, and utilities. Once the critical design phase is completed, municipalities often first procure products such as LED lighting, smart grid technology, parking meters, smart waste management

meters, and others—on a regional/staged basis. These systems offer the greatest return on investment and represent the swiftest tangible benefits to municipalities and its citizens.

LED Lighting

A July 2017 report issued by Markets and Markets projects that the *Outdoor LED Lighting* market alone is expected to reach \$21.95 billion in 2023, enjoying a 13.7% CAGR from 2017-2023. The report offers the following key highlights:

In 2016, the highways & roadways end-use application segment led the outdoor LED lighting market. However, the public places segment of the market is projected to grow at the highest CAGR during the forecast period, 2017 to 2023. The growth of the public places segment of the outdoor LED lighting market can be attributed to the increasing infrastructural activities across the globe.

The retrofit installation type segment of the outdoor LED lighting market is projected to grow at the highest CAGR during the forecast period. The growth of the retrofit installation type segment of the market is due to the increasing replacement of incandescent lamps in the existing infrastructures with energy-efficient light sources such as LED lamps. These incandescent lamps are being slowly phased out, and the fixtures are being retrofitted with LED lamps as they have a long lifespan and consume less energy.

Drivers:

- *Need for Improvement in Visibility And Safety of Drivers, And Pedestrians*
- *High Demand for Led Lighting Driven By the Modernization And Development of Infrastructures Such As Smart Cities And Economic Corridors*
- *Need for Energy-Efficient Lighting Systems for Highways*
- *Reduction in Prices of LEDs*
- *Demand for Smart Controls in Street Lighting Systems*



In addition to the correlation between LED lighting and Smart Cities, where LED is primarily of the outdoor variety, the indoor LED lighting industry is even larger. Zion Research forecasts that the total LED market worldwide will grow from \$26 billion in 2016 to \$54.2 billion in 2022, with residential application accounting for 40% of total sales.

Cannabis

The U.S. cannabis market is arguably today's fastest growing industry. According to ArcView, the U.S. cannabis market is projected to enjoy a tremendous 30% CAGR with revenue slated to leap from \$6.7B in 2016 to \$22.6B in 2021. Currently 29 states have legalized marijuana for medicinal use and 7 states have approved it for recreational use. California is the largest market by far in the space, accounting for 27% of 2016 sales, followed by Colorado at 20% and Washington (state) at 11%. If recreational cannabis is approved in California, as expected, estimates are sales could quickly leap to \$5 billion or more annually.

(For the purposes of this report, we are focused on what we deem the key geographic markets for AV1 Group: California, Colorado, Washington, Nevada.)

29 LEGAL MEDICAL MARIJUANA STATES AND DC

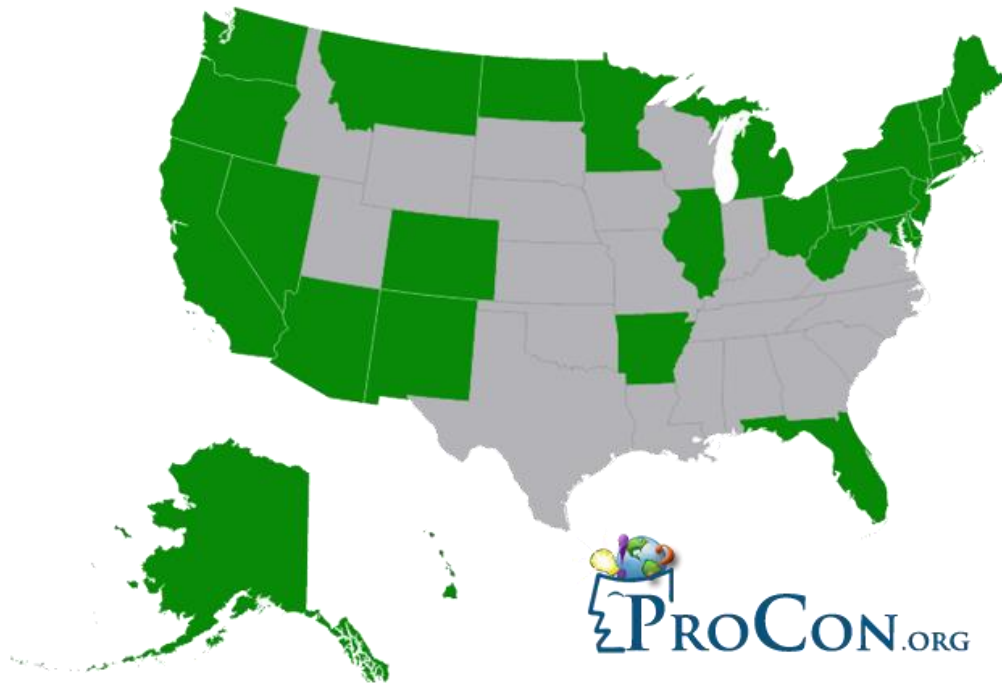


Figure 2: Medical Marijuana Approvals

It may seem hard to fathom, but according to the Drug Enforcement Agency (DEA) marijuana is still considered a Schedule I drug by the federal government, placing it in the same category as heroin. Schedule I drugs are found to have a high potential for abuse, have no acceptable medical treatment use, and are considered to inherently have a lack of safety protocols for use while a patient is under medical supervision. Despite these factors, twenty-nine (29) states have legalized the sale and Adult Use of marijuana and Tetrahydrocannabinol, or THC, the primary psychoactive constituent of marijuana, primarily for medicinal purposes. Plus, a handful of others could pass Adult Use laws.

Since the legalization of marijuana for recreational use became effective in Colorado and Washington in 2014, sales have been brisk—especially in Colorado which enjoyed sales of \$125 million in March 2017 alone. Nevada, where recreational cannabis sales went into effect only in June 2017, a shortage of product has ensued!

Given the high growth rate and sheer size of the industry, tremendous revenue potential is in the offing for opportunistic and forward-thinking companies. Moreover, with ever-changing laws and the emergence of new players and businesses across the country, early information and networking service providers can enjoy first mover advantage as thought leaders while innovative companies can garner broad brand awareness.

A DIVERSIFIED FIRM POISED TO SUCCEED

AV1 Group, Inc. is an investment and holding company that incubates, funds and supports emerging growth companies, and disruptive businesses. The Company seeks models and businesses displaying revolutionary concepts which can make a substantial footprint in high growth markets. AV1 Group's business model also delivers internally-created projects that are poised for revenue generation, and a cross-company revenue platform enabling the Company to incubate and foster growth in early stage subsidiaries under one umbrella.

In our view, AV1 Group is a misunderstood company, as evidenced by its undervalued market value. This is likely due to the following reasons:

First, the Street did not place adequate value on its cannabis-related assets, i.e. its many domains that serve as vertical business services information portals and consumer information sources. We believe that these assets enable the Company to eventually serve as valuable thought leaders in key information segments. Moreover, the depth of the domain ownership and potential content value could be quite lucrative once they are fully marketed. Thus, AV1 Group will foster cross-platform marketing and generate meaningful revenue by having multiple shots on goal.

Second, the Street appears to have discounted the value of the Firm's strategy and its principals to its success. Management's investment approach is centered on investing in both ancillary and non-ancillary cannabis-related companies in a variety of industry verticals, with a preference for scalable, high-margin businesses that have the ability to quickly become market leaders. The Company's leaders exercise a diligent investment approach and conduct rigorous due diligence, in order to ensure that they select only the best firms, with a sustainable competitive advantage and strong potential to become future market leaders.

Last, it appears that the first half 2017 acquisitions of XFIRE Smart Systems and Intelligent Lighting have gone unnoticed. XFIRE alone is on track to generate \$15M – 18M in revenue in 2017 alone, given recent contract wins and its current pipeline. Based on the current market cap, it appears as if AV1 Group is being valued for the cannabis businesses (at a discount) and assessed essentially no value to its most important revenue-generating subsidiary. Thus, we believe that significant rises in market value lie ahead for these shares.

STRONG PORTFOLIO OF COMPANIES



XFIRE Smart Systems

X-Fire Smart Systems: provider of LED lighting, Smart Grid Technology, Wireless Controlled Systems, Smart Parking Meters, Charging Stations, Utility Meters, and Picocell Technology.



Vapor High USA

Vapor High USA is committed to creating a foundation of success and growth, and to deliver cutting edge quality products.

CannaLighting

About CannaLighting

CannaLighting is a wholly owned subsidiary of AV1 Group, Inc. CannaLighting is actively building strategic relationships in the LED sector.



Dental Cannatizer

Owned by Dent Group, Inc., a subsidiary of AV1 Group, boasts a cutting edge technology that the Company is rebranding as the "Dental Cannatizer".



About Intelligent Lighting

Intelligent Lighting Corp is a California based technology company committed to manufacturing and marketing of state-of-the-art, patented, energy-saving products and technologies.



GrowthSpectrum Lighting

The GrowthSpectrum product line is an array of industry specific, state-of-the-art lighting equipment that will be marketed to the cannabis industry.



Lawster.com

Putting consumers and small businesses in contact with legal services and service providers. Lawster is here to assist you in protecting your rights.



Hemptory.com

Hemptory is an engaging new online one stop destination for all hemp and cannabis related products and services.



MJIQ.com

MJIQ is the first comprehensive, enterprise-grade integrated software suite for the legal cannabis industry, enabling business owners to manage their dispensary.



MJTestLabs.com

AV1 Group is in the process of developing an instrumental website that will act as a conduit between dispensaries, laboratories, and industry affiliates.

www.goldmanresearch.com

Key Subsidiaries: Smart Cities/LED Lighting



XFIRE Smart Systems is the Company's most important subsidiary—period, at this point. The Company is a provider of LED lighting, Smart Grid Technology, Wireless Controlled Systems,

Smart Parking Meters, Charging Stations, Utility Meters, and Picocell Technology. With a \$7M win and a \$2.5M win from 2 different municipalities in the last few months alone, it is easy to see why revenue could reach as high as \$18M in 2017, with 50% growth possible in 2018. In both cases, XFIRE was chosen by a major city in the Midwest (Ohio and Michigan) to design and implement their SMART City transitions. In both cases, the Company has partnered with Apollo Smart Lights, a provider of intelligent LED lighting solutions.

In late June 2017, the Company acquired 49% of Intelligent Lighting Corp. ("ILC"), a privately-held company that owns a disruptive technology that can be used to produce a whole new generation of light bulbs for commercial and consumers use. Intelligent Lighting Corp's flagship product, the *PowerDisc*™ is a revolutionary patented technology that increases light bulb life to over **fourteen years** burning 24/7 while reducing energy consumption up to 42%. The second product is an energy efficient incandescent light bulb - the *eCandescent*™. A standard incandescent light bulb has a pre-determined life of 1300 hours, (approximately 54 days). The *eCandescent*™ can burn for over 130,000 hours or 24 hours per day, 7 days per week for 14 years. These products could serve as game changers in this space.



Key Subsidiaries: Cannabis Infrastructure



AV1 Group includes 2 LED lighting companies, white labeler *CannaLighting* and *GrowthSpectrum*. The *GrowthSpectrum* product line is an array of industry specific, state-of-the-art lighting equipment that will be marketed to the cannabis industry. The Company's strategic partnership with the LED manufacturer, branded under the *GrowthSpectrum* line, allows entry into a fast growing market with minimal overhead. This will enable the Company to spearhead into

producing revenue. *CannaLighting* targets grow houses nationally in an effort to deliver the *GrowthSpectrum* brand of LEDs.

Among the dozens of cannabis-centric domains in its portfolio are domains that are B2B, B2C, C2C and investment-oriented. Two that stand out to us include *Lawster* and *Hemptory*. *Lawster* places consumers and small businesses in contact with legal services and service providers while *Hemptory* is an emerging, new online one stop destination (with a business directory) for all hemp and cannabis related products and services. *MJIC.com*, currently in beta, is the first comprehensive, enterprise-grade integrated software suite for the legal cannabis industry, enabling business owners to manage their dispensary, grow, and supply operations with easy-to-use interfaces for end users. A series of real estate domains for cannabis players could also prove valuable properties as content is generated and marketing commences.

Key Subsidiaries: Diversified Cannabis

The *Dental Cannatizer* could emerge as a sleeper and flagship product in the space. The antiseptic and anti-inflammatory benefits of hemp oil are well known to contain unique properties that are very beneficial. This patented cutting-edge dental cleansing tool can provide superior results due to its revolutionary design and the integration of hemp oil infusing replacement cartridges. Currently in the prototype face, it will generate revenue via the sale of units along with residual sales of insertable/replaceable cartridges, a proven and highly lucrative model.

This state-of-the-art device is unique in its design which utilizes increased water pressure to flush out harmful bacteria, plaque, and miniscule food particles which accumulate from millions of microscopic spaces located on the teeth and gum valleys where a toothbrush or floss can't reach. Conveniently constructed for use in the shower, its design includes the dispensing of hemp oil, which is highly recognized for its numerous holistic attributes.

The *Cannatizer* thoroughly cleans teeth and gums by flushing fissures and pits in teeth (the most common place for cavities) to remove bacteria, residues, and other contaminants, leaving teeth absolutely sparkling; allowing re-mineralization to occur naturally and organically with the restorative and medicinal qualities that hemp oil provides. In an attempt to leverage and dominate marketing and branding in the dental category, the Company also owns a series of domains specializing in the dental product category.



Established in 2014, *Vapor High USA* is an 800-product strong e-commerce site catering to the fast-growing vape market. Management believes that it is the largest online marketplace in the vaping category.

FINANCIALS

It appears as if 2017 shall be a breakout year for AV1 Group. Key, signature wins in the Smart Cities arena should lead to new wins in the U.S. and abroad and provide meaningful operating profits. While sales will be dominated by this segment in 2017, we believe that *Vapor High USA* and LED lighting for the cannabis arena and other, related businesses should serve as solid contributors, beginning next year. Furthermore, we view 2018 as a turning point for initial, sizable commercial and retail sales of the game-changing *PowerDisc™* light bulb and first significant marketing and sales of the revolutionary *Dental Cannatizer*.

Although recorded quarterly revenue has been negligible to date, we believe that with the strength of the Smart Cities contracts, AV1 Group could generate \$15-18M in sales this year with a 50% rise in revenue for 2018. If sales of all combined units approach or surpass \$30M next year, we believe that \$3M or greater in operating profits could be in the cards.

It should be noted that with pure play LED stocks such as Revolution Lighting (NASDAQ – RVLN – NR) trading 1.3x 2017 sales, we believe that AV1 Group could be worth \$0.40+ today for the Smart Cities business alone. Thus, investors would be getting the other LED line and the cannabis-centric businesses, which have the greatest growth potential, for free.

EXECUTIVE LEADERSHIP TEAM

Bryen Beglinger, CEO, President, Treasurer and Director

Mr. Beglinger has been President and Director of AV1 Group, Inc. since April 2014. Previously, from October 2013 to April 2014, he was Vice President Marketing for International Land Alliance, Inc. and from 2009 to 2013; he was Financial Representative with The Guardian Life Insurance Company of America. Mr. Beglinger has a B.A. from San Diego State University.

Heather Atkins, CIO

Ms. Atkins has been Chief Information Officer of AV1 Group, Inc. since December 2014. She has also worked as a Presale Technical Consultant for Hewlett Packard Enterprise since January of 2016. Prior to that, she worked as a systems engineer at Varonis from January 2015 to January 2016; a Senior Systems Engineer at EMC from 2012 to 2014; and a Senior Solutions Engineer at Adobe Systems from 2008 to 2012.

Lisa Landau, VP and Director

Ms. Landau has been Vice President and Director of AV1 Group, Inc. since April 2014. She is also President of Intelligent Lighting Corp. since 2011. She is a licensed real estate agent in California since Jan. 2005. Ms. Landau also attended Thomas Jefferson School of Law in San Diego, California with an emphasis in international trade.

Farid Shouekani, Director XFIRE

Mr. Shouekani has more than 15 years of experience in corporate management, engineering and software development of communications system including wireless, switching, networking and VoIP. For the past decade Mr. Shouekani was working with Viper networks on building international network and cost effective services for the VOIP residential and commercial customers. He has managed several national and international offices for the company and all the contracts for technical and commercial services engaged with the company. Mr. Shouekani has a strong experience in project development and software system design, as he developed a MS Windows based systems for welding robotic automation for the auto industry with Robotron, and several communications and controls projects. Mr. Shouekani has played a significant role in attracting investment to the company, cut cost, and sustain operations with the current economy. Mr. Shouekani has a Bachelor of Science Degree in Electrical Engineering and a Master of Science Degree in Computer Engineering from Florida Tech.

RISK FACTORS

In our view, the Company's biggest risks are related to the timing and magnitude of sales in the cannabis-related business lines, along with future marketing and sales of the *PowerDisc*[™] light bulb and the *Dental Cannatizer*. A related risk is regulatory given that cannabis is still classified as a Schedule I drug and state regulations and guidelines seem to change on a dime. A secondary risk could be the access to and the availability of capital to fund consistent marketing campaigns and technology advances.

Volatility and liquidity are typical concerns for microcap stocks that trade on the over the counter market and especially those that are not generating meaningful revenue. Finally, the shares outstanding of this stock could increase due to potential capital needs or to execute future acquisitions. However, since the proceeds of any future funding would likely be used in large part to fund its marketing or product development activities, we believe that any dilutive effect from such a funding would be nullified by a related increase in overall market value. In our view, all of these risks are consistent with firms of similar standing and status to AV1 Group.

VALUATION AND CONCLUSION

Through strategic acquisitions and careful incubation and support, AV1 Group owns diversified businesses in some of the world's largest and fastest growing markets. These include the Smart Cities, LED lighting, and U.S. cannabis industries.

With key signature wins in recent months and strong prospects in the pipeline, it appears that AVOP's flagship Smart Cities subsidiary could generate as much as \$18M in revenue in 2017 and enjoy huge growth in 2018. The 49% purchase of an innovative lighting company could prove to be a sleeper in 2018 and beyond.

Leveraging its early mover advantage, cross-development strategies, M&A activity and numerous domain assets, AVOP is poised to emerge as a niche segment and thought leader in the cannabis arena. Cannabis-centric LED lighting products and a unique, patented cutting-edge dental cleansing tool could lead to AV1 becoming a household name in the industry.

AVOP also owns the largest online vaping marketplace in the category, which boasts more than 800 products.

We believe AVOP is significantly undervalued at current prices. Based on the Smart Cities/LED flagship alone, AVOP should be worth \$0.40+, when compared with key publicly traded peers such as Revolution Lighting (NASDAQ – RVLN – NR). Thus, the cannabis and other businesses are essentially thrown in for free, based on the current AVOP stock price. In our view, given the development of the *Dental Cannatizer* and *PowerDisc*[™], and the value of the deep cannabis domains and related assets, a more reasonable assessment for these lines is in the tens of millions. Thus, we rate these shares Speculative Buy with a \$0.75 price target.

RECENT TRADING HISTORY FOR AV1 GROUP, INC.

(Source: www.Stockta.com)





SENIOR ANALYST: ROBERT GOLDMAN

Rob Goldman founded Goldman Small Cap Research in 2009 and has over 20 years of investment and company research experience as a senior research analyst and as a portfolio and mutual fund manager. Rob also concurrently serves as the Director of Research for Marble Arch Research Inc. During his tenure as a sell side analyst, Rob was a senior member of Piper Jaffray's Technology and Communications teams. Prior to joining Piper, Rob led Josephthal & Co.'s Washington-based Emerging Growth Research Group. In addition to his sell-side experience Rob served as Chief Investment Officer of a boutique investment management firm and Blue and White Investment Management, where he managed Small Cap Growth portfolios and *The Blue and White Fund*.

ANALYST CERTIFICATION

I, Robert Goldman, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report.

DISCLAIMER

This *Opportunity Research* report was prepared for informational purposes only.

Goldman Small Cap Research, (a division of Two Triangle Consulting Group, LLC) produces research via two formats: *Goldman Select Research* and *Goldman Opportunity Research*. The *Select* format reflects the Firm's internally generated stock ideas along with economic and stock market outlooks. *Opportunity Research* reports, updates and Microcap Hot Topics articles reflect sponsored (paid) research but can also include non-sponsored micro-cap research ideas that typically carry greater risks than those stocks covered in the *Select Research* category. It is important to note that while we may track performance separately, we utilize many of the same coverage criteria in determining coverage of all stocks in both research formats. Research reports on profiled stocks in the *Opportunity Research* format typically have a higher risk profile, and may offer greater upside. *Goldman Small Cap Research* was compensated by the Company \$4500 for the production and distribution of this report. All information contained in this report was provided by the Company via filings, press releases or its website, or through our own due diligence. Our analysts are responsible only to the public, and are paid in advance to eliminate pecuniary interests, retain editorial control, and ensure independence. Analysts are compensated on a per report basis and not on the basis of his/her recommendations.

Goldman Small Cap Research is not affiliated in any way with Goldman Sachs & Co.

Separate from the factual content of our articles about the Company, we may from time to time include our own opinions about the Company, its business, markets and opportunities. Any opinions we may offer about the Company are solely our own, and are made in reliance upon our rights under the First Amendment to the U.S. Constitution, and are provided solely for the general opinionated discussion of our readers. Our opinions should not be considered to be complete, precise, accurate, or current investment advice. Such information and the opinions expressed are subject to change without notice.

The information used and statements of fact made have been obtained from sources considered reliable but we neither guarantee nor represent the completeness or accuracy. *Goldman Small Cap Research* did not make an independent investigation or inquiry as to the accuracy of any information provided by the Company, or other firms. *Goldman Small Cap Research* relied solely upon information provided by the Company through its filings, press releases, presentations, and through its own internal due diligence for accuracy and

completeness. Such information and the opinions expressed are subject to change without notice. A *Goldman Small Cap Research* report or note is not intended as an offering, recommendation, or a solicitation of an offer to buy or sell the securities mentioned or discussed. This report does not take into account the investment objectives, financial situation, or particular needs of any particular person. This report does not provide all information material to an investor's decision about whether or not to make any investment. Any discussion of risks in this presentation is not a disclosure of all risks or a complete discussion of the risks mentioned. Neither *Goldman Small Cap Research*, nor its parent, is registered as a securities broker-dealer or an investment adviser with FINRA, the U.S. Securities and Exchange Commission or with any state securities regulatory authority.

ALL INFORMATION IN THIS REPORT IS PROVIDED "AS IS" WITHOUT WARRANTIES, EXPRESSED OR IMPLIED, OR REPRESENTATIONS OF ANY KIND. TO THE FULLEST EXTENT PERMISSIBLE UNDER APPLICABLE LAW, *TWO TRIANGLE CONSULTING GROUP, LLC* WILL NOT BE LIABLE FOR THE QUALITY, ACCURACY, COMPLETENESS, RELIABILITY OR TIMELINESS OF THIS INFORMATION, OR FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES THAT MAY ARISE OUT OF THE USE OF THIS INFORMATION BY YOU OR ANYONE ELSE (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOSS OF OPPORTUNITIES, TRADING LOSSES, AND DAMAGES THAT MAY RESULT FROM ANY INACCURACY OR INCOMPLETENESS OF THIS INFORMATION). TO THE FULLEST EXTENT PERMITTED BY LAW, *TWO TRIANGLE CONSULTING GROUP, LLC* WILL NOT BE LIABLE TO YOU OR ANYONE ELSE UNDER ANY TORT, CONTRACT, NEGLIGENCE, STRICT LIABILITY, PRODUCTS LIABILITY, OR OTHER THEORY WITH RESPECT TO THIS PRESENTATION OF INFORMATION.

For more information, visit our Disclaimer: www.goldmanresearch.com